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TRAVELS

IN THE

WILDS OF ECUADOR

AND THE

EXPLORATION OF THE PUTUMAYO RIVER.

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BY

ALFRED SIMSON.

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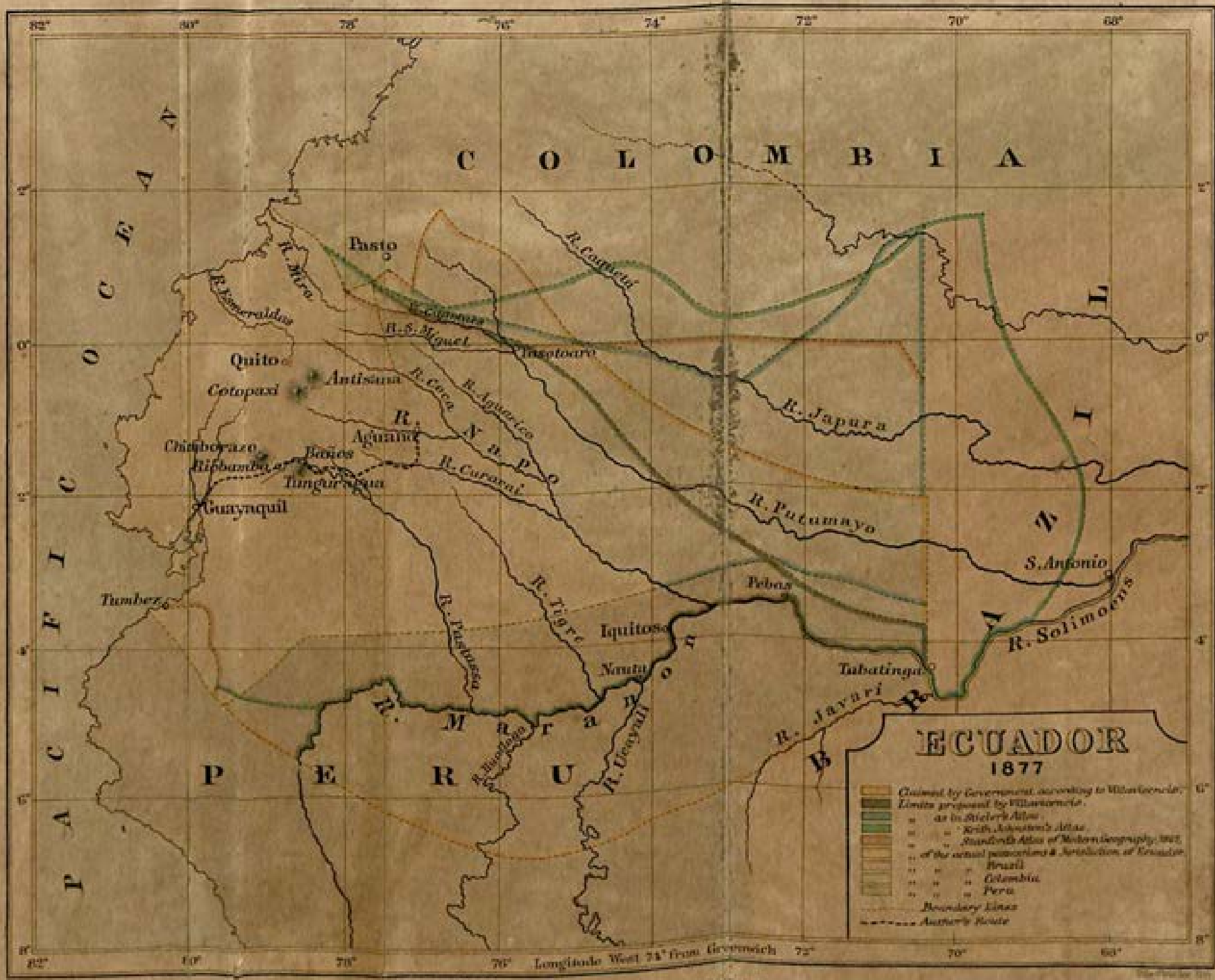

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TRAVELS

IN THE

WILDS OF ECUADOR.

CHAPTER I.

MEANS OF COMMUNICATION IN ECUADOR—INACCESSIBILITY OF THE ORIENTAL PROVINCE—JOURNEY FROM GUAYAQUIL TO RIOBAMBA.

No one with the spirit of roaming within him can live long in Ecuador without cherishing a growing desire to explore its unknown parts.

The entire country is so interesting, owing to its grand mountains, magnificent scenery, terrible volcanoes, the fertility of its soil, and the endless variety of its products, that a closer acquaintance with them becomes irresistible. It was the growth of this desire, tending especially towards the exploration of the almost mystical "Provincia del Oriente," the wild easterly province of Ecuador on the northern headwaters of the Amazons, that occasioned the journeys I am about to relate.

Travelling, even in the most advanced portions of

Ecuador, those who have been there can tell to their cost, is not the comparatively easy mode of progression, of one sort or another, to be found in most half-civilised countries; and the bad state of the roads is one of the few things of the kind told by travellers which has hitherto not been transcended by description. No one who has journeyed from Guayaquil to Quito has yet, to my knowledge, been disappointed; but all have found the reality to surpass the worst they had been led to expect even by the most graphic accounts of the horrors of the route.

The term "road," indeed, which in Ecuador in but few cases means more than a track, almost impassable in the rains, denotes, east of the Cordillera, nothing more than the line of route from one place to another. Bare tracks there are often none; and the traveller must make his way, with such casual Indian guides as he may be able to procure, climbing and forcing himself through the pathless forests, toiling footsore along the rough beds of streams, and crossing the rivers as best he may without bridges; and where the rush of the waters is too precipitate, and the bed too rough, without even canoe or raft.

The high valley between the two ranges of the Cordillera, which in Ecuador is double, is practically accessible from the west; firstly, by the Sierra del Azuay to Cuenca;* secondly, by the valley of the river

* Portions of the description of these travels and of some of the Indian tribes, have been treated of in papers communicated to the Royal Geographical and Anthropological Societies.

Guayas over an outlying ridge, or by the valley of its tributary, the Yaguachi, to the valley of Chimbo, whence three passes are available. One, the Arenal, over the south-east declivity of Chimborazo; another, the Puyal; and lastly, the Tachuelo to Cajabamba. The two latter are to the southward of the former, and all attain an elevation of about 14,000 feet above the sea-level, *i.e.* some 1000 to 1500 feet below the permanent snow-line. The main road from Guayaquil, the principal port of the Republic, to the capital, passes over the Arenal; but a railroad was in course of construction along the Yaguachi valley to Sibambe, where it was to join a good cart road. A portion of this road was the ancient highway of the Incas which connected Quito with Cuzco, and it still bears testimony to the grandeur of the engineering works executed under those monarchs.

The land routes east of the Andes are extraordinarily unknown even in Ecuador itself; and the greatest difficulty was experienced in obtaining any information whatever about them. In the civilised portion of the country, and more especially on the coast, the Oriente and the Napo are looked upon as neither more nor less than an "*inferno*," wherein "he who enters leaves hope behind."

It is considered almost madness that any one should voluntarily undergo the risks and dangers that are to be encountered, such as wild and murderous tribes; abandonment in the pathless wilderness by the Indian

guides; possible imprisonment far from human habitation between uncrossable rivers and torrents; the risks of jaguars and snakes; and last, but not least, the fevers, scurvy, and other diseases likely to be brought on by fatigue, bad and insufficient nourishment, and constant exposure to the damp, insect-plagued climate.

In travelling across the country it was only when Baños was reached, the last civilised village on the Pastassa, that the approximate number of days required to complete the journey to the Upper Napo, the means of transport and subsistence, the tribes to be met with on the way, &c., could in any measure be ascertained.

In Guayaquil, encouragement was offered in the vague admonitions of friends, amongst which starvation in misery, and the effective scalping, or rather dermic decapitation, of the Jívaros occupied prominent places. Warnings were gravely held out to us in the fate of Gonzalo Pizarro and his men, who lost more than half of their 4000 Indians and 220 out of 350 of the Spaniards, * with all the horses and dogs, on the same journey we proposed to undertake, from hardship, exposure, fatigue, and want. Circumstances had not altered since that time, and that expedition was commenced with every apparent necessity duly provided for; an enormous stock of provisions and herds of swine. As something more recent, the decimated and forlorn ranks of a Spanish Commission which descended the river; and the

* Robertson.

fate of an Italian traveller, about twenty or twenty-five years ago, who ran imminent risk of his life, abandoned by his guides, were referred to as pictures of the troubles to be expected. The Bishop of Guayaquil, and the President, Don Gabriel Garcia Moreno, whose sanction had to be obtained to enter the "Oriente," counselled that the journey should at least not be undertaken at that season of the "*nevadas*," or heavy snows and rains on the mountains, with consequent flooded torrents and rivers, and deep miry soil. But precisely the season formed one of the attractions, as being the time when all Nature, streams, forests, and animal life, were to be seen in their most interesting and imposing phases. At Guayaquil it was impossible even to ascertain what articles would be best adapted to take for barter with the Indians; but at Riobamba the assurance was voluntered by persons, however, who proved to know as little about the subject of our inquiries as we did ourselves, that nearly all the articles we took from the coast were unsuitable. This turned out to be both true and untrue; for the wares, such as *lienzo* (unbleached cotton cloth), beads, small looking-glasses, knives, scissors, &c., answered their purpose very well, although their quantity was unnecessarily large, and their particular description differed from that usually bartered by traders with the Indians of the Oriente.

All the necessary arrangements were at length concluded; and our money bags, consisting of waterproofed bales containing common cotton cloth, beads,

cotton thread, needles, fish-hooks, knives and small mirrors, embarked.

A light-draught steamer lands the traveller, after about seven hours steaming up the Guayas, at Bodegas, which derives its name from being the storing place for all merchandise passing from the interior to Guayaquil, and *vice versâ*, the goods being conveyed thence downwards by water and upwards on the backs of mules, horses, bullocks and men.

After the usual amount of haggling and bargaining —too frequently dwelt upon by travellers already—ten animals, equine and bovine, were engaged for the baggage, and three beasts for Mr. Sarkady, a Hungarian, who was my travelling companion, myself and our servant, a half-breed of the lowlands. From Bodegas the route traverses alternations of high wooded and low thorny mimosa plains. The road is not metalled, but consists of mud of all densities, from the most liquid to sticky clay in which the horses have to exert their utmost powers not to be held fast, almost throwing one off their backs by the energetic working of their whole frames in their strenuous efforts to extract their legs from the mire. Savaneta, a miserable row of dirty huts on the left bank of the river, was reached in the afternoon.

Whilst awaiting the preparation of the evening meal, we took a small canoe and tried a novel mode of fishing which we had practised with great success before in creeks on the Guayaquil river lower down. We caught a number of "*damitas*," a small and delicate fish,

resembling the dace in form and appearance, and with which the river swarms. The method employed is a primitive one, and commendable for its simplicity. A small piece of meat is held near the surface of the water in one hand, and the other hand placed underneath it; the fish then swim to the bait and voraciously attempt to devour it, when they are caught in the hand which awaits them, by its suddenly being closed upon them. In a quiet little stream, where these fish were very abundant, I and two companions have caught in this manner over a hundred in less than an hour, the bait used being the entrails of a chicken.

After leaving Savaneta and the low Guayas valley the road began to rise along the depression of a large torrent, in many parts defiling by one side of the gorge at the upper edge of the stream, and frequently crossing it; each descent or ascent to or from the bed being little short of perpendicular. Imagine the bed of a torrent composed of large stones and boulders, with an admixture of broken trees and branches, filled out evenly with soft mud, so that its surface *appears* almost level, and some idea of a greater part of this day's route will be formed. It is incredible how horses, especially with heavy packs, can pass it, the main highway of the country. Its fearful *abandon* is typical of the state of affairs generally in this despotic Republic. Imposing natural masonry, if the building of aquatic force may be called by this name, is also to be seen along the road. The bed of the torrent has been worn

perpendicularly down through a laterally more extended bed of boulders and coarse shingle; and as one passes along the base of the escarpment it presents the aspect of an immense ancient stone wall. The scenery is most enchanting, and the vegetation equally so—tree-ferns, the wild plantain (*bijao*), calladiums, mosses, and finer ferns of the maiden-hair description, orchids, and other such plants being profusely intermingled under the openings in the higher woods with parasites and creepers.

The indescribable beauties of Nature as displayed in its surroundings, render the squalor of Balzapamba, a main halting-place on the way where unfortunately the night had to be passed, the more repulsive. Balzapamba is simply filthy, worse than any average pigsty at home, and far more disgusting. The *locro*, a kind of potato soup—the principal food of the Serranos—and usually the only aliment obtainable on the roadside, contained cockroaches; and it is to be feared, with good reason, that literally every corner was inhabited by, if it were possible, even more antipathetic animals. In such places, eggs, when they can be procured, are the only safe food, but they must be taken plainly boiled, and quickly eaten immediately the shell is broken. This, though, is one of the inevitable drawbacks that have to be put up with in the Sierra, where every kind of domestic insect pest known in England exists with the addition of further infinite varieties. We frequently found that, notwithstanding the keenest appetite, we

could not bring ourselves to eat roadside fare, but rather appeased the edge of our hunger with a few biscuits from our precious stock.

The "capillary" forests in the mountain regions of Ecuador, swarm with "capital" game. Lice of different species are the most abundant, and it is amongst the commonest sights to see the inhabitants engaged in their chase, keenly pursuing them in each other's heads and cracking them when captured between their teeth. Happy the unwary traveller who, sore and stiff, overcome by the fatigues of the day, can lay himself down to rest, unaware of the other savage beasts, sarcoptous and ixodous,* that may at any moment fall upon him and tear him to pieces.

At Savaneta we had bought two dogs, recently, according to their owner's account, arrived from the Napo. This, however, was a falsehood, gratuitously uttered to interest us the more in the purchase, as the owner knew that we were *en route* for the Napo. Deceptions of this kind rarely go against the conscience of the half-breed here, as in many other parts of the world.

Above Balzapamba the true ascent of the mountains began, and the road continued thence zigzag and winding round them at a steep gradient.

The butterflies were innumerable and their variety very great just at the foot of the hills. Below Balzapamba, at this season, Morphos and Acræidæ were the

* *Amblyomma rotundatum*, Koch. The common hemipter is also plentiful.

most conspicuous; the former with their dazzling metallic blue completing the enchantment of the scene, as they lazily flapped their glittering wings in their curiously jerky flight. As the elevation became greater, the vegetation also began to change; the tropical plants and flowers, bamboo-cane, &c., disappeared, and fuchsias, a species of rhododendron, calceolaria, heliotrope, and such like, took their place as though the journey were a rapid transit to higher latitudes. These flowers of the temperate zone also began to get scarce towards the top of the ridge, where the air was extremely cold, damp and misty.

At about half-past one we arrived at a place consisting of two huts, called Tambo Loma, whence we again started after partaking, with many misgivings, of a plate of *locro* and chicken. Shortly before, I was able to prevent a serious fight between our *arrieros* (muleteers) and some men who lived on the roadside. The quarrel had already reached the height of two broken heads, one man knocked down over the edge of the roadway, but caught happily in the bushes, and a drawn matchet, which, however, was sheathed again in the face of my revolver.

The summit of the pass of the first outlying western ridge of the *cordillera* was reached after dark; and the only solitary "*tambo*" found crowded with *arrieros* and their cargo. Neither room for protection from the rain and exceedingly misty, damp, cold air, nor food of any kind being procurable, we were compelled to lodge in a

partially constructed hut, where, after two hours infinite patience and perseverance, we succeeded in making some damp straw and wet sticks burn into a flame. Upon this fire a tin of green peas was heated and, with some biscuits, formed our inadequate supper after a nine hours' ride that day. The camp beds were then made up for the night, which was very cold and misty,—conditions certainly not improved by the new undried mud walls on only two sides of the "*tambo*." The other sides were open to the blast. But the disagreeable temperature was soon left behind in the morning upon slipping and tumbling down a shockingly bad path, composed chiefly of quagmires, to San José de Chimbo; the latter part of the way, however, was through a most lovely country, adorned with flowers and scented like a garden.

The views from "El Chuche," the highest point of the pass, were magnificent; the distant mountains below looked like coast-lines, and the densely packed clouds, still lower down, like a sea.

The valley of Chimbo is picturesque, and is cultivated all over with lucerne, wheat, beans, and Indian corn. The village is rather neat, and bears some comparison with many small European villages, especially in the Rhine Provinces; its streets are paved and in much better order than those of Guayaquil. The people, as in all the interior, are of very dirty habits. One man, on our stating that we wished to go to the nearest stream (as no washing-basins were to be found) to wash ourselves, expressed great astonishment; and on our

inquiring if they never washed there, readily replied, "Never, as it makes one ill!" This was said in a warning tone so that we might not wilfully damage our health. The admonition, it is needless to say, was disregarded and we afforded our acquaintance and his friends, called together for the purpose of observing us, considerable surprise and amusement by washing ourselves in the icy-cold brook, a performance they had evidently never witnessed before. We were from that moment looked upon with more interest than before, no doubt as "peculiar people!"

An hour and a half distant from San José de Chimbo, by a fair though unfrequented path, for the most part through fields of corn and pasture, is the little village of Santiago. Only at one point is the road interrupted by a rather steep descent and a surging torrent, across which the horses were passed with difficulty. One of the dogs was washed right away, but he was fortunately afterwards recovered, not much the worse for a good rolling in the water.

We arrived at Santiago after a thorough ducking by a "*páramo*," * and put up in a little *adobe* house of one of the prominent villagers. I took a coat, which the thorns on the road had badly torn, to the only tailor the village boasted of, to be mended. My guide conducted me to the village school-barn—it could not be called a room — where, upon my entrance, the pupils

* The sudden heavy showers on the mountains are called "*páramos*."

politely rose, and the schoolmaster came forward to greet me, for he was the tailor. He received my coat and promised, with the most dignified polish of manner, to mend it immediately, for which operation, I grieve to say, the education of more than twenty children was suspended. He called to pay his respects in the evening, and seemed by his conversation to be far above the mental standard of the other Santiagueños.

Thence, leaving the Chimbo valley to cross the main western chain, our road lay at first through grass fields and over cultivated hills, a continuous precipitous ascent, until, after descending a gully and crossing a torrent, it began to be less agreeable, mounting through damp, mossy woods, with overhanging bushes and boughs, which interfered considerably with our progress.

As we rose, the damp, parasitic, woody vegetation gave way to páramo grass, heaths, and a few hardy ferns and gorse-like plants—and we at last really commenced to go through the little frequented Tachuelo pass, firstly winding in and out the gullies, and then crossing the main stream. We next defiled along a ledge of rocks and stones on the right bank of the torrent, to all appearance, and in reality to a calm judgment, impassable for a goat; yet it had to be passed on horseback, slipping, jumping, and struggling in all manner of contortions to guard one's legs and feet from getting jammed against the rocks. At last

we came to the head of the torrent, and, re-crossing the same, now very small, traversed some swampy grass-land (páramo grass at this elevation being the only vegetation) and reached the end of the western side of the pass. Here a ridge, as it were a wall, of solid bare rock, crosses the pass entirely, and only in the centre of the wall at the top is a small breach, access to which is gained by a break-neck path winding over loose porphyry *débris*. The first and second parts of the descent on the eastern side correspond exactly in character to the western, with a similar inverse sequence of bare rock, páramo grass, juniper and gorses, hardy ferns, rhododendron, and finally the temperate highland zone of heliotrope and such-like flowers. The breach, or "window," as the natives call it, can be very little short of 14,000 feet above the sea-level. Toiling on and on through the eastern side of the pass, we at length arrived at Cajabamba, at half-past eight o'clock at night, having been in the saddle over twelve hours without intermission, and without any food whatever but a cup of milk at six o'clock in the morning. Hunger, however, was soon forgotten in the demolishment of some *locro* in the miserable house at which we put up for the night. For the third time we had arrived in the evening wet through from the rain which had poured down just before entering the town, a circumstance by no means tending towards comfort, as drying is out of the question; and in this case all our bedding and clothes had remained behind. We

therefore had to sleep in wet garments on our wet *ponchos*, covered with ditto, on the damp earth floor of a miserable dwelling, the night being very cold and wet.

Cajabamba is the old Riobamba, and still shows many signs of the larger town which formerly occupied its place, and which was the scene of some of the most terrible seismic convulsions of the earth ever witnessed in history. The large landslip, or falling down of a huge piece of the mountain on the side of which the town stands, was still plainly visible, and the place looks generally almost as if it had never been rebuilt since that catastrophe in 1797.

Before leaving Cajabamba, we visited a warm spring called "Cunuc-poyo" (Quichua—warm spring), and the lake of Colta-Cocha (pool of the farms, or plantations), which the people say has no bottom, doubtless an exaggeration of its depth, which at the south end is considerable. We were accompanied on this excursion by a woman who called on us (*para saludarnos*) the morning after our arrival. She was a most voluble personage, and immediately informed us what we ought to see before our departure, and insisted, notwithstanding our protestations, in riding with us to the lake and the spring. Her loquacity was quite overwhelming, and she was apparently the only person in the town with any enterprise or energy. She told us however that she did not belong to Cajabamba, and so cannot be cited as an exception to the general apathy of its

inhabitants. She kept a shop, the only one in the town that was not mainly a low liquor store, and on our return from Colta-Cocha, in the most graceful and polished manner she presented me with a cigar, and my companion, a non-smoker, with an old dry bread-roll.

From the old town to Riobamba, we passed down a ravine, cut away by a torrent through an immense depth of volcanic tuff and scoriæ, showing the enormous quantity of matter that must have been ejected by the surrounding giant volcanoes in times gone by.

Modern Riobamba lies in a sand valley or plain of the great centre highland, surrounded by mountains—Chimborazo, Carguairazo, Tunguragua, and Altar, all being visible from its *plaza*; and those who are familiar with these names can well imagine the unequalled grandeur of such a scene, especially when contemplated by moonlight. The clearness of the atmosphere, already so frequently noted by travellers, is remarkable; but in a manner it detracts from the imposing dimensions of many features in the view, though, at the same time, it renders all lines distinct and definite. At night the heavens, when not overcast, were marvellously bright, and the stars appeared to have augmented their numbers tenfold. The silver light of the moon shining on the pure snow-clad cones, seemed to impart to the mind a newer and truer realisation of sublimity, as one gazed almost spellbound from the rough, jagged crater

walls of Altar and Carguairazo to the smooth, regular slopes of Chimborazo and Tunguragua. In saying that this clearness of the atmosphere detracts from the scene, I mean that it almost annihilates distance, and thus objects that would elsewhere be lost in the haze of remoteness, stand out as well defined as though they were placed close to one's eyes. Chimborazo is a noteworthy example of this; and from Riobamba its slopes look so near and so invitingly gentle, that it is difficult to efface the impression that it would be an easy matter to walk straight up its smooth acclivities to the summit.

The construction of the houses at Cajabamba and Riobamba is somewhat curious; and in the former place they looked all much alike. A small stone building consisting of a single room, with a door to the street, usually forms the kitchen and shop. The sleeping apartment is a separate building at the back of a large yard, which has to be crossed each time a change of room is made. The yard has a door also opening on to the street from a wall contiguous to the face of the fore-building. In the house in which we slept at Cajabamba, we asked leave to occupy the kitchen and shop, as the bedroom contained some very distasteful bedding, a quantity of firewood, and large rough boughs of trees not yet cut up, an extra-damp earth floor, and a high pointed grass roof, without any ceiling and open at both ends.

These conditions, added to the wet clothing in which

we had arrived, and for which there was no change, were so miserable, that we applied to our hostess for special permission to sleep in the kitchen, as the cooking and smoke had dried it a little, and it boasted, besides, of a ceiling! This consisted of matting plaited with rough flattened rushes, and was suspended by cords of the same material to the rafters of the grass roof. The cords, however, had given way in the centre of the room with the weight of a guano deposit on the ceiling; for the roof being open at both ends, the loft formed a harbour and roost for all the fowls of the air. In parts the ceiling itself was broken through, and at the main breach it hung below the level of my head, forming a shoot through which the valuable Peruvian staple was precipitated into the room as it is into the ships' holds at the Chincha Islands.

At Riobamba the houses, churches, and all buildings are very low and have only a ground-floor. Excepting, of course, the Indian huts, mostly on the outskirts of the town, they are all built of stone, and the walls are up to three feet in thickness. Each house occupies a very large extent of ground, and stands round a court-yard.

On our rounds about the town one day I procured, with some difficulty, an old door originally from the ruins of old Riobamba. The proprietress of the house of which it formed the street door was somewhat astonished, as may be imagined, when I called and

asked her to sell me her front door; and I had difficulty in persuading her that I was not joking. It was a good representation of Spanish carving of about 150 years ago; and all the old stone sculptures, such as church facings, &c., are similar in style.

CHAPTER II.

RIOBAMBA TO BAÑOS.

DURING our stay at Riobamba we started one day with a Señor Mosquera, on horses he kindly provided, for San Luis and Punin, villages about two hours' ride from Riobamba. At Punin, through the goodness of the chief authority, we procured six Indians, much against their will, to accompany us to a ravine close by, where, the river having cut through a great depth of volcanic tuff and scoriæ, the bones of mastodons, an extinct horse, two species of deer, and other animals exist in great quantity, exposed to view in the sides of the cutting. The quantity of bones deposited within a comparatively small space is so large that they must probably have been washed together by some extensive flood, connected with the eruption of one of the neighbouring volcanoes, which have supplied the ejecta in which the remains are imbedded. The gorge is from 300 to 350 feet deep, worn through a homogeneous mass of scoriaceous tufa.

At the village of Punin we saw part of the celebration of the *fiesta* of San Juan by some Indians, who came to

the "Jefe Politico's" house. Four of the natives were dressed in a most fantastic garb, with long plumes on their heads, white wigs, and boots. On their backs hung a piece of cloth adorned with gilt and silver braidings, embroidery, and small mirrors, giving them from the back something of the appearance of a Roman Catholic priest clad for high mass. After dancing very seriously to a fife and drum played by one of their party, they saluted our host and retired at the sounding of some large reed horns played by other Indians.

Besides the extensive and interesting deposit of extinct animal remains near Riobamba there are other natural objects in the vicinity worthy of special notice. One of these is the sinking village of Cacha, which in 1640 entirely disappeared with all its inhabitants, said to have numbered 5000 souls. "The catastrophe," says Dr. Wolf,* whose account I cannot do better than quote, "it appears took place in repose and silence, though rapidly; for, even in the immediate neighbourhood, neither earthquake was felt nor noise heard. A proof of this is that the priest having a short time before gone out with the sacristan to administer the sacrament to an Indian who lived some little distance from the village, was on his return much astonished not to find even the site where Cacha had previously stood. The disaster doubtless did not emanate from any volcano, either directly or indirectly. The valley in which Cacha is situated has the form of a cauldron, and is bounded

* 'Chronicle of the Andes,' p. 43.

on the west by the conical hill of Chalarung. It is nothing more than a landslip or depression of the ground, in the hollow of which Indian huts may now be seen scattered here and there. Its outline is oval and its greatest diameter would measure about one league. Very steep precipices of volcanic tufa, which cover this district, circumscribe the limits of the sunken soil; and this still continues sinking, though with the very slow motion called in geological phraseology secular sinking. In consequence of this phenomenon, all the houses, however new they may be, present cracked and oblique walls; and on all sides the ruins of old houses are to be found. As the depression is progressing unequally on different spots, the soil of the oval valley is necessarily uneven and full of fissures, as if it had just suffered from an earthquake. A quarter of an hour farther down, and nearer to Yaruquies, is another circular valley or hollow in the volcanic tufa, in which the sinking is no longer progressing. Tradition makes no reference to its formation; but to judge by the very steep precipices and the general appearance as of a recent epoch, the depression cannot date from very far back. This hollow, and also the one mentioned above, are well cultivated, as they are sheltered spots, and enjoy a mild temperature."

It was in the village of Cacha that the direct descendants of the Shyri family Duchicela, the rulers of Quito before its annexation by the Incas of Peru, resided after the fall of their dynasty; and on this account the *caciques* of the place enjoyed special

privileges and immunities for over 150 years afterwards. It seems probable that the village took its name from the last Shyri princess, Cacha.

One of the most picturesque sights at Riobamba was the market place on great market days, when the *plaza* was densely thronged with Indians from all the surrounding country, dressed up in the bright baizes of their own weaving, with Chimborazo as a background to the picture. The variety of commodities offered for sale was also very interesting, and included live stock in the shape of cattle, sheep, horses, donkeys, and llamas.

The type of the highland Indian and many of their habits are remarkably similar to those of some of the Himalayan tribes, such as, for instance, the Bhutias.

We tried everywhere to collect further information regarding the journey to the Napo, and at a casual meeting with a priest in an apothecary's shop, a conversation ensued, in the course of which our clerical acquaintance informed us that he knew something about the Indians in those parts, and that the most likely thing that would happen to travellers would be that they would wake up one night to find themselves transfixed by a lance. However, this kind of discouragement, of which a good deal was put in our way, only gave zest to the undertaking, perhaps because the truth of the information was felt to be doubtful.

On the other hand, some valuable advice and assistance was obtained in this city of the "Journey on the Plain" (*Rio-bamba*) from Don Pedro Lizarzaburu, a

brother of the Bishop of Guayaquil, who had kindly furnished me with letters of introduction, and from Don Antonio Mosquera, as to where peons to carry the baggage to Canelos might be procured, with many useful hints regarding the character and habits both of the Canelos Indians, and that peculiar class of men, the peons themselves.

At length, leaving Riobamba, rendered so famous by Humboldt, we still traversed for another three hours on horseback a continuous plain of volcanic sand with no vegetation but stunted Indian corn, not more than one foot to eighteen inches high when bearing grain, and *Cabulla* or aloe. Of the latter, two kinds are abundant, the Mexican and the *Cabulla blanca*. The latter is really misnamed, being the darker of the two. This plant is a most useful one on the sandy plains where it thrives, surpassing in its varied utility even the cocoa-nut palm of the lowlands. The root supplies syrup, the leaves fibre of high strength and quality, the flowers pickle or preserve; the stalk makes a valuable rafter for native huts, since it is light, and strong, and distasteful to white ants; and finally, the dead leaves form the Indian's fuel.

On reaching the higher part of the plain, against a strong north wind, the path led downwards towards the river Chambo and its bridge at Penipe. Our approach to the turbulent river at last really made us realise that we were crossing the continent, when we considered that the stream we were now to pass runs

directly into the Atlantic, although after a course of some 3500 miles!

The Penipe bridge was a most dangerous-looking structure: a tumble-down suspension bridge, the two main chains of which were rusted through and through, and broken in several places, where the links were joined by weatherworn scraps of ragged cord made of the aloe root. Under the transverse boards on which one steps, ropes of the same coarse material were stretched longitudinally and were in a fearfully dilapidated condition. On one side some were entirely wanting, so that the floor of the bridge was tilted over to one side. At first sight it seemed like foolhardiness to venture upon such a structure, over a stream swollen with the rains and rushing past between steep rocky banks at a most uncomfortable pace.

Of course all the beasts had to be unladen and led across one by one without their loads; for even the not fearless but senseless natives of Penipe would not cross with a loaded mule or horse.

Humboldt, in his 'Vues des Cordillères,' mentions in describing this bridge, that shortly before his arrival at Penipe a very dry wind, preceded by long rains, had caused all the cords to break at once, and four Indians were drowned. The bridge was considerably altered at the time we saw it, if Humboldt's drawing and description were correct when he visited Penipe, but the structure has not improved. The river, at all events, when we crossed it, presented quite a different appear-

ance to the drawing in the 'Vues des Cordillères;' but this may be owing partly to the large quantity of water that was passing its swollen bed at the time. The banks as we saw them were much steeper; and on the Penipe side deep water ran right against the main high bank formed by the steep eroded slope of the mountains on which the village stands. A talus such as Humboldt shows under the bank did not exist, or, at least, if it did, it was completely covered with water.

We got off our horses and crossed the bridge ourselves, but had great difficulty in persuading our men, with one exception, to do the same, although they were professional muleteers, and knew this road. It was only with the timely assistance of two Penipe men, who happened to be passing, that animals and loads were safely transferred to the other side. Three of our people suffered themselves to be led over the bridge by the hand, like the mules that they were, with fear and trembling.

When the first horse was crossed we were almost confidently awaiting to see the bridge break, and hang vertically from either side, and we experienced a feeling almost akin to disappointment at finding that all our belongings were landed without mishap on the right bank.

The loads were finally readjusted, and we were half way up the steep "*cuesta*" leading to the village, when two men jumped out from behind a rock commanding us to stand. To our speechless astonishment, we beheld

before us two friends whom we had left at Guayaquil, and one of whom we had thought in the Galapagos Islands.

Although we had intended to push on a couple of hours farther before night, we naturally allowed ourselves to be led into the village, where we passed the night; and Penipe thus came, in our opinion, to rank as the best of all the interior villages we had as yet halted at. The dinner, in an Ecuadorian sense, was capital, as likewise was the breakfast; good eggs, good meat, and good *locro*, a piece of Bologna sausage, and half a bottle of Burgundy! the relishes being the absence of cockroaches in the dishes, though if close inquiry had been made, they were likely to have been in the saucepans. However, to use a proverb of the country, and one which it is indeed well for the traveller to take to heart, "*Lo que el ojo no ve el corazon no siente.*" *

The gentlemen who placed these delicacies before us had come unexpectedly to Penipe to examine a graphite mine. They found it; but the mineral was small in quantity, and poor in quality. A vein of fine anthracite was discovered, however; but when this may come to be extracted in such a remote mountain region, who can tell?

The *arrieros* were despatched early, and after breakfast we all started together at ten o'clock;

* "What the eye does not see, the heart does not feel"—*i.e.* "Out of sight, out of mind."

one of our friends for Guayaquil, and the other for Quito, whilst we two set out for Baños and the Amazons.

Our road from Penipe lay along the ledge of the Chambo valley, the river flowing between very steep mountains on either side. At about eleven o'clock we came up with our *arrieros*, who had been despatched in advance of us, and found them standing at the side of a torrent, usually easy to pass, but now swollen with the heavy rains from above, and carrying down large stones in its current. We waited patiently for about an hour-and-a-half to see if the flood would subside, and then at last attempted crossing, as the water showed no signs of diminishing. We reached the other side in safety on horseback. This, however, did not at all animate our men to follow our example. They remarked that they were not equal to or "made for" (*hechos*) crossing that torrent, and no inducement was sufficient to make them attempt it.

It is a surprising trait in the character of all these common Serranos of Ecuador, that they are utterly shameless of showing fear; and where their dull perceptions allow this feeling to get into their heads, it is impossible to induce them to overcome it, either by persuasion, shame, or practical illustration of the absence of danger. I determined not to wait until they crossed, so continued my road alone, leaving my companion, Mr. Sarkady, the job of trying to get the remainder of our train across the stream,

whilst I went forward to prepare a resting-place at Baños.

To begin with, I missed my way, but was soon put right again, and lost little by it. I then crossed a much larger torrent, with a very "devil's bridge" over it, at a great height above the stream, and very shaky, its construction consisting of approaches made of wood laid on the ledge, cut into the water-worn hill-side, and projecting over it. On the other side of the water was a similar construction, stones being placed upon the further ends of the logs to prevent their over-balancing with the weight of the bridge proper which was thrown across from the extremities of the approaches on either side. If, therefore, a weight heavier than was provided for by the stones upon the ends of the logs forming the approaches were brought to bear upon the centre, the whole bridge must inevitably have collapsed. There was, however, no remedy but to cross, so I did so without much hesitation, and, fortunately, without the collapse that the frail structure seemed to give reason that one might expect.

A difficult ascent next brought me to a path leading up and down hill, and in and out the "*quebradas*," or breaks of the main valley, where some of that most annoying of all riding fell to my lot, namely, up and down steep slopes, whilst heavy rain was pouring down, and the overhanging wood and bushes scratching my face, and continually attempting to tear off my hat and *poncho*. Up to three o'clock nothing was to be seen

on account of the rain, when quite suddenly a gust of wind cleared away the clouds, and the precipitous mountains on the other side of the river were again visible. With intervals of rain and sunshine, the day wore on, and the first narrows of the river Chambo were passed. They run all along the base of Tunguragua, where the stream flows through a bed of hard lava. In many places it is not more than twenty feet broad, with its walls often overhanging, and cut out of this dense material. Falls and rapids occur intermittently; and all of them owing to their wonderful and rare bed, are very unique and beautiful.

Upon my reaching the mouth of the Patate the rain came down in torrents; and as it was already five o'clock, I began to despair of getting to Baños before nightfall, not knowing if I was on the right track or not.

Opposite the confluence of the Patate and Chambo, which from this point flow on under the name of Pastassa, is the "Juivi Grande" of 1776, a most wonderful conglomeration of broken blocks of lava, scoriæ, and stones, all mixed in the roughest confusion. No large streams of lava, mountains and vales of tüff, or vast plains of volcanic sand and ashes, have ever given me such a vivid impression of the terrific destructive power of a large volcano. These lavas have the appearance, to use a homely simile, of the roughest fernery rockwork, only far more irregular and on a giant scale,

all shot into a heap. A path had to be picked through its midst, and a quarter-of-an-hour goes in winding one's way between its rude blocks.

After this follows a flat piece of scrub-land; and then again the valley narrows, and the track winds along the ledge of the hills, and in and out the ravines. In rounding a sharp, steep ledge, high above the river, my saddle, in the horse's strenuous efforts to get up the slope without sliding backwards, slipped right over his haunches. He immediately halted, and I got off to repair the fault; but in dismounting my legs were so stiff that I could not avoid dragging the saddle partially over with me, and it then slid right round underneath the horse's stomach. This frightened the animal so much that he at once commenced rearing, plunging, and kicking violently. As the path was only about six to eight feet broad—above, a perpendicular wall of rock; and below, a jagged precipice some 300 feet down to the foaming water—the position was not agreeable; and the only safety lay in placing myself flat against the rocky wall, whilst, in his lunges, the charger's heels several times flew in very unpleasant proximity to my head. At his first kicks, the saddle and bags fell over his buttocks and hung around his hind legs; and subsequently by a very high kick all the remainder of his trappings was sent flying up into the air. One *poncho* which I used as a rug, part of the saddle, and one bottle alighted on the path; but the remainder of the saddle and the saddle-bags, with all their contents,

fell down into the depth. The frightened animal escaped following them by a hair's-breadth; his hind legs actually vanished over the side; but with a supernatural effort he righted himself again on to the path, and immediately stood still, as a lamb, trembling from fear, after his miraculous deliverance.

I readjusted the wrecks, and as darkness had come on now found myself in an even more unpleasant position than before, having to continue on foot leading the horse, whilst heavy rain continued pouring down, and the way being quite unknown to me. I stumbled along through mud, puddles, rocks and stones, and through a torrent, the depth of which I could not ascertain until I cautiously entered it and fortunately emerged on the other side, whence however no ascent was discernible, until after looking with my face near the ground and feeling the way, I at length found a gap in the bushes and ascended. A ledge so narrow that only one person could pass at a time, as I afterwards found out by daylight, brought me to a house where I was informed that I had reached Baños. After begging shelter for the night in several houses in vain, I was fortunate enough to find the temporary residence of Mr. Lizarzaburu, a brother of the Bishop of Guayaquil, who received me most kindly and gave me a bed for the night, where I soon forgot the toils of the day, awaking only now and then at hearing the cannonading of stones and *débris* which were incessantly detaching themselves from the mountains on the left bank of the Pastassa, and

have been thus crumbling away for years. Once in the night a tremendous shock startled me. It proved to be a large landslip, loosened by the heavy rainfall from the pendant side of the mountain just behind the village, about a quarter of a mile distant. The rain had been so abundant that most of the bridges were also carried away. My companion, who had remained behind with the peons, arrived the following day, and we then engaged a "Comerciante del Oriente" (a merchant of the East), as they are called, who had lived seven years on the Napo, to be our foreman and interpreter hence to the borders of that river. His occupation, like that of almost all the rest of his class, had gone, as trading with the Indians was at the time forbidden; and Canelos, Macas, Sarayacu, Curarai, and the Upper Napo were all placed under the unlimited authority of the Jesuits, who maintained some six missionaries there. With the new "Mayordomo" I made a trip to Peliléo on the Patate, to engage the men necessary for carrying our baggage to the Upper Curarai from Santa Inez, where they were to meet us three weeks later.

In order to get to Peliléo, the Cosúa bridge over the Chambo having been carried away, I had to make a long *détour* by the next bridge which crosses near the centre of the base of Tunguragua. The road at first was merely a repetition of the same one I had passed two days previously, until it turned off down to the river, where there is a bridge consisting of a few logs

thrown across the steep and narrow lava gorge, not more than thirty feet in breadth, through which the waters foam below. On the left bank, we then had to ascend a very long and steep *cuesta*, damaged in several places by the heavy rains, so that the acclivity was in parts even steeper than usual, and it seemed to be quite as much as the mules could manage. They held their footing, as they always do, wonderfully, in places where one would have thought it impossible for them to climb, and where it was necessary for the rider to lie on their necks so as not to fall backwards. From the top, the road winds round the hillsides and descends gradually along the Patate valley to Peliléo, through hedges of Mexican aloe thickly interwoven with the sweet-scented heliotrope.

I reached Peliléo at about two o'clock, and was fortunate in engaging twenty men and leaving again for Baños at noon the next day, after paying them their usual advance.

On the return down the Patate valley I saw Tunguragua straight before me; and on its right, farther back, the Candelaria, a long line of snow-capped mountains which must doubtless culminate in the magnificent Altar. The view we got of the first-named volcano from the left bank of the Chambo was unequalled. We were about 1500 feet above its base with only the river between us, and thus had a perfect view of its entire conical shape, from the unclouded summit of pure white right down to the

extremities of its base at the river, not a particle of it being hidden from sight by any unevenness of the ground.

Baños is situated on the right bank of the Pastassa, at an elevation of 5904 feet above the sea-level, and enjoys the agreeable mean temperature of 63½° Fahr. It lies in a kind of large circular pit or caldron, enclosed by the steepest mountains, the only outlets being the narrow valleys of the river. At night, especially, one could easily imagine oneself to be in a large well or pit, surrounded by high dark walls, with the heavens visible only vertically, high above one's head.

Just behind the village, the hills retire from the river, and so leave a little level ground which is utilised for the cultivation of sugar-cane. This, notwithstanding the rather low temperature, thrives, as it is irrigated by the warm water from several springs issuing from the back hills, whence also a pretty cascade falls.

The only industry and occupation of the inhabitants is the manufacture of spirit, to which almost all the cane is dedicated. As a natural consequence most of the inhabitants drink heavily and are good-for-nothing, lazy, and unreliable in the highest degree. Had it not been for the kind assistance of my friend, Mr. Lizarzaburu, we should have fared badly indeed at Baños.

Before continuing the narrative of the journey from

Baños into the Oriental Province, leaving all traces of civilisation behind, a chapter will be dedicated to the general description of Ecuador, and one to the history of the Oriental Province. Those who already possess a general knowledge of the topography of the country can safely skip over the next chapter.

CHAPTER III.

GENERAL DESCRIPTION OF ECUADOR.

BEFORE we are able to cast a glance upon the physical geography of Ecuador, it is necessary first to define what territories are included under the title of this Republic; and special attention must be given to this subject, since the boundaries of Ecuador, as they actually now stand, scarcely enclose *one half* of the smallest superficies usually ascribed to them in most of our maps. As far as the coast is concerned, the limits are clear; but at some distance inland east of the Andes, no limits appear ever to have been absolutely settled upon with any precision, so definite boundaries cannot yet be laid down. Still less, however, than the approximate ones now to be described, can the further adoption of any of those manifold ones traced upon maps in general use be recommended. Indeed, the conclusion must be arrived at by any one examining these maps, that the larger the number of authorities consulted, the greater becomes the confusion, and the more hopeless the object of attaining a correct idea of the extent of Ecuador.

If the rough map affixed to this work be consulted, the great differences between the boundaries given by various geographers will be seen, and the equally important disparity between any of these and the present limits of the actual possessions and jurisdiction of Ecuador.

Most authorities seem to have agreed on the eastern boundary running north and south between the 70th and 71st degrees of longitude west of Greenwich; but regarding the northern and southern limits all differ.

In Stieler's atlas the southern frontier runs from a spot sixty to seventy miles up the river Chinchipe, almost due north-east, till it reaches 78° 30′ longitude, whence it continues in an east by north direction to a point due north of Tabatinga, which town, however, neither on this map, nor on most other general atlases, is quite in accordance with the position determined by the Brazilian Survey Commission (viz., long. 26° 46′ 24″ W. of Rio, lat. 4° 14′ 30″ S.). From here, as before mentioned, the line runs due north, crossing the Putumayo, Japurá, and Uaupés to 1° 30″ N. lat., whence, in a curved south-west direction, it again returns to the Japurá in long. 72° 50′, runs up that river a little over another degree of longitude, and then, crossing the equator at an acute angle gradually bending more northward, reaches the longitude of Pasto in 50′ N.

Villavicencio, whose map of Ecuador may be taken on the west of the Andes to be as correct as it is unreliable on the east, gives as the boundary claimed

by the Government of Ecuador a line running from Jaen, near the confluence of the Chinchipe and Marañon, in a south-east direction across the Huallaga a little north of Tarapoto, and then east up to the Ucayali, whence it continues north-east, and follows the Javarí up to the Marañon.

Notwithstanding the asserted claims of his Government, Villavicencio gives it further as his own opinion of what the southern limit should be, to suit the claims of both Peru and Ecuador, the main stream of the Marañon down to a spot opposite the mouth of the Javarí river, which, be it remarked, is wrongly placed on his map in relation to Tabatinga. On the north, he draws a line from the eastern slope of the Andes, north-east of Pasto, midway between the Putumayo and Caquetá (Japurá), down to 2° 10′ S. latitude, in the same longitude as the southern boundary—viz., the mouth of the Javarí. The longitudinal line connecting the two eastern extremities he gives as the "boundary with Brazil according to the treaty of San Ildefonso in 1777."

As with the southern, so also with the northern limit, Villavicencio traces another frontier demarkation, which in his opinion should be adopted by simply running a line equidistant between the Napo and Putumayo, thus excluding the latter river entirely in favour of Colombia.

In Keith Johnston's atlas the southern boundary is the same as that proposed by Villavicencio; but a

small triangular piece is cut off between 4° and 5° S. latitude, from the Chinchipe to the Marañon. In the north and east though, enormous additions are made to Ecuador, especially in the latter direction, where the frontier is bulged out to longitude 68° 20′ W., and takes in some 120 miles more of the north bank of the Marañon. What probably in part throws the boundary so far eastward on this map is the different position of the Caquetá and other rivers; but until the courses of these be determined, it is impossible to say who is right and who is not.

We have now looked at some of the maps of Ecuador; but in order to picture to ourselves an approximate plan of the territories at present in actual possession of that Republic, we must take neither the extreme claims of the Government, mentioned by Villavicencio, nor that geographer's more moderate and conciliatory boundaries; and still less can we adopt the wider limits on the north-east corner given in Stieler's and Johnston's atlases.

Since, therefore, no limits have been officially fixed, they must be drawn so as to include only the possessions of Ecuador as they now stand, and of these the confines may be seen approximately delineated on the map.

On the north-east the Government authorities have since some time recognised the Coca and Napo as their frontier with New Granada; but the latter country seems to have come to no definite arrangements with Peru as to its boundaries on the left bank of this river.

A settlement called Cayaposa, a little higher up than the river Masan, on the opposite bank, is generally looked upon as the frontier, and the Peruvians appoint an official there; but the same individual, and others, have had at least the offer of the same official post from the Colombians. On the right bank, the little river Masan is recognised by Ecuador as its frontier with Peru; but the latter republic has pretensions, ostensibly based on some old treaty, to the Napo "as far as it is navigable." On the Pastassa and the neighbouring northern affluents of the Marañon, the Peruvians have pushed forward on every possible occasion, and at one time there was a Peruvian "*cura*," nominated by a Peruvian bishop, as far up as Andoas. This elicited some protests from Ecuador; but the apathy and ignorance of the Government with respect to its province "del Oriente" is so complete, that it can cause no surprise if encroachments gain upon their territory from year to year, and the rich and gold-teeming province becomes more and more lost to them.*

The general outline of Ecuador is cuneiform, with a seaward base, off which the south-western corner has been cut, and placed below the wedge (whose apex faces east) a little farther to the eastward. Its greatest dimensions are included approximately in something over six and a half degrees of latitude, and about seven

* Much interesting information on the affluents of the Marañon proper should be contained in the reports and maps of the Peruvian Survey under the direction of the Confederate Admiral Tucker.

and a half of longitude, the bulk of the land lying between 1° N. and 4° S. latitude. The total area may therefore be estimated at not over 80,000 square miles, or one quarter of the highest, and rather more than *one half* of the lowest, figure usually given.

Notwithstanding its equatorial position, and a temperature subject to little fluctuation, almost every variety of climate may be found in Ecuador, owing to the unequal elevation of the land; and the soil itself, also being in different localities of entirely distinct character, we find almost every description of fauna and flora: from the lichen and condor of the snowy crag, to the richest tropical palm forest and the macaw; from the clear temperate slopes of the strawberry and the llama, to the heavy, moist home of the plantain and the alligator; from the highland desert of volcanic sand, to the lowland *sabana* with its browsing cattle.

The great mountain range of the Andes, which commences in Tierra del Fuego and runs up to our dominions in North America, enters Ecuador from the south, divided into two more or less defined chains, with a high tableland or valley between, and assumes here, throughout, its grandest and most imposing forms and dimensions. These two ranges, which separate the waters flowing to the Pacific from the more important rivers which contribute their waters to the Atlantic, contain, in less than 300 miles of length, over twenty mountains, and a much larger number of peaks, reaching an elevation greater than 15,000 feet above the sea-

level, and consequently eternally snow-capped; all of volcanic formation excepting two, the Sara-urcu and Cerro Hermoso.

Here are volcanoes and volcanic productions in every stage. Immense plains of volcanic sand, mountains and vales of tuff and scoriæ—in some of the lower strata of which are embedded numerous animal remains of the quarternary period—streams of lava, fields of pumice, and the great cones themselves; some extinct, others smoking and dormant, and one, the Sangai, in unceasing activity, all ready periodically to break out and again devastate the country around them, as they have so often done before.

A definite idea of the magnitude of the two ranges may be formed from the following enumeration of some of the most important mountains, with their respective measurements as taken by Messrs. Reiss and Stübel.

The western range contains amongst others:—

	Feet above the sea-level.
Chimborazo	20,697
Iliniza	17,400
Carguairazo (Carahuirazo)	16,748
Cotacachi	16,288
Corazon	15,796
Pichincha	15,701
Rumiñagui	15,603

And the eastern:—

Cotopaxi	19,493
Cayámbi	19,155
Antisana	18,880

	Feet above the sea-level.
Altar	17,735
Sangay	17,460
Tunguragua	16,685
Sincholagua	16,360
Imbabura	15,029

Without tarrying here to describe these mountains separately, and each of them has its own interesting history already told by others, let us next pass on to see how they throw off their waters to the ocean.

The western slope is drained by the rivers Guayas—the largest on the west coast of South America—the Mira, Esmeraldas, and other minor streams, such as the Santiago, Rio Verde and Ostiones. The drainage of the eastern slope is carried off by the Santiago (Paute) and Morona, on its southern portion; but by far the most important part of the *cordillera* of Ecuador throws off its waters by the Pastassa and Napo. Of these two, the former commences in two headwaters, the Chambo taking its source on the high land of Alausi, skirting the western slopes of Sangay, Condorasto and Altar, on a northerly course, then, bending round the base of Tunguragua, it is joined just above Baños by its companion, the Patate, which contributes the drainage of the great valley from the north. Both rivers then flow on together in a south-easterly direction, under the name of Pastassa, through a deep valley, with steep, and in many places almost perpendicular sides, which roll off numerous torrents and cascades, of which the

Topo, in conjunction with the Shuñi (Zuiñag), Rio Verde, Pindo (Pintuc), and Bobonaza, are the most important. All these enter on the left bank, from the south and east of the Llanganati mountains. From the junction of the Bobonaza, the largest tributary, the Pastassa takes a more direct southerly course down to its outflow on the north bank of the Marañon, some 2800 miles from the sea.

Following up the eastern slope of the mountains, all the streams north of the Bobonaza have their outflow into the Napo, excepting the Tigre, whose source is very much farther east than the others, probably on the extreme outrunners of the *cordillera*.

Taking them from south to north, the Curarai and its branches carry off the drainage of the north-east and north slopes of the Llanganati; the main river, Napo, springs from the eastern declivity of Cotopaxi, and south-east of Sincholagua; the Coca originates between Antisana and Cayámbi, and the Aguarico drains the north-east slopes of the latter. From its source to the mouth of the Coca, almost as important as the main river, the Napo runs an easterly course, and thence abandons its rough, uneven, stony bed, and noisy mode of progression, for a smoother and staider, though still swift current, continuing in a south-easterly direction over a bed of fine sand and finally mud, where but few small elevations of mostly red earth and loam relieve the monotony of its low, even banks. Its waters are at last discharged into the Marañon, about 500 miles

below the outflow of the Pastassa, after a course of 750 miles from its source on the slopes of Cotopaxi.

The highlands and great centre valley of the Ecuadorian Andes, between the two ranges, enjoy a most agreeable and invigorating climate, and their soil brings forth almost all the vegetable productions of the temperate zones. It is only upon these elevated regions that manufacturing industry has found any development in the Republic—the manufacture of straw hats on the coast alone excepted—chiefly in the neighbourhood of Quito, Cuenca, Riobamba, Latacunga, Ambato and Ibarra. The first-named town is of great historical interest as the capital of the Quitu and Cara kings, and the last two Incas, the greatest of their race. The last four names are connected in our minds with fearful earthquakes and volcanic phenomena of great magnitude.

Commencing from the north, these towns stand upon the following elevations:—

			Degrees Fahr.
Ibarra..	..	7,688 feet, with a mean temperature of	60·8
Quito ..	..	9,348 „ „	55·7
Latacunga	..	9,187 „ „	57·5
Ambato	..	8,554 „ „	59·4
Riobamba	..	9,148 „ „	56·6
Cuenca	..	8,469 „ „	58·3

Thus the average elevation of the six chief towns in the valley is 8732 feet, and their mean average temperature 58° Fahrenheit.

On the western lowlands, intermingled with the

artificial clearings for the cultivation of cocoa, cotton, sugar-cane, fruits, and pasture, in the forests and along the river banks, we find natural *sabanas*, and in the dry season, from about June to January, all is bare and parched, owing to the total want of rain, with the exception of some half-dozen showers falling generally about October. In a circumscribed locality, though, near to the never-watered north Peruvian desert, hardly a dry day is known in the year.

On the eastern slope, however, all this is changed. The rainy season may be said practically to last from the commencement to the end of the year, and the natives say, as in Colon: *Aqui llueve trece meses en el año* (It rains here thirteen months in the year). The heaviest rainfall, with snow and thaws on the mountains, and the consequent flooding of the rivers, occurs from about March to August.

Here no "*sabanas*," or open plains, are to be found; all is covered by the same dense, impenetrable forest, where the vegetable kingdom truly lives a life of struggle for existence, the fittest living and thriving upon the death and decay of the weaker and decrepit. Here the tradewinds, which blow up the great Amazon valley loaded with the moisture of the Atlantic, are continually discharging the same upon the slope of the giant wall which arrests their advance; and though at exceptional times rain may not fall for two or three weeks, the soil and all the lower vegetation are scarcely the less saturated, for the sun can never penetrate and

cheer the gloom of the green canopy Nature has placed over them.

The greater part of the moisture from the Atlantic is condensed upon the valley of the Amazon, and especially upon the eastern slope of the Andes; but some of it, indeed a considerable portion, is concentrated in clouds, by the natural laws of gravitation and condensation, round the summits of the snow peaks, which are seldom seen entirely unshrouded.

Upon these heights, again, much moisture is deposited in the form of snow; but yet part escapes their attractive hold, and finds its way occasionally to the western side, where its remaining humidity falls in the shape of rain on to the lowlands and slopes, near the borders of the Pacific.

CHAPTER IV.

HISTORY OF "LA PROVINCIA DEL ORIENTE."

THE lands covered by dense primeval forest now forming the Oriental Province of Ecuador were first entered into in the year 1541 * by Gonzalo Pizarro, who descended the Coca and Napo to its disembouchure in the Marañon, where he was abandoned by his captain, Orellana, who had been placed in command of

* This date, it may be noticed, differs from that given by Prescott and Lorente (beginning of 1540), Garcilasso de la Vega (1539), and others who have followed them, as the time of the commencement of Gonzalo Pizarro's famous journey. According to the Royal historian, Herrera's account, quoted by Robertson, Orellana began to descend the *Coca or Napo* in the first days of February, 1541, which is much nearer the truth. But if Orellana accompanied Pizarro, which is indubitable, that was impossible; for according to the old municipal records, still extant at Quito, and examined by Dr. F. Wolf, Pizarro was still in Quito on the 21st of February, 1541, though evidently shortly about to start on the journey. Further, according to Gomara and Zarate (Wolf, 'Crónica de los Andes,' p. 13), we are clearly given to understand that the expedition was at least two months *en route* before it had even passed the snow-range, so that the descent of the Coca could not have been entered upon *before* the end of April, 1541.

a vessel constructed to facilitate the advance of the party.

There seems to be great difference of opinion as to the route Pizarro took on this memorable journey. But if the scant details we have be duly compared, it may be pretty safely assumed that on leaving Quito, approximately the same route was taken as is now followed to reach Maspa. It is probable that in crossing the *páramos* of Saraurcu the least exposed passes were not selected because not yet explored, and this would account for the extraordinary sufferings from cold endured by the members of the expedition. The stream down the borders of which they descended, and which is usually considered to have been the Napo from the commencement of the journey, but by some authors is mentioned as either the Napo or Coca, must clearly have been first the Coca; for to get to the Napo without descending the Coca, having started in a northerly direction from Quito, as Pizarro did, the, at that season impassable, Consanga must have been crossed, which barrier would have been certain to form a prominent feature in the narrative. Besides, a great cascade, such as is specially mentioned in Orellana's account, does not exist on the Napo, but it does on the Coca, at a considerable distance (some 120 miles) from its source, as the narrative implies; and this is confirmed by the statement that they "had journeyed down along the banks *for many days*" before reaching the cataract. The fall of the river at this furious cataract,

however, which the excited imaginations of the adventurers estimated at 1200 feet, is given by Villavicencio as about 140 feet, which is doubtless approximately correct. At the fall they crossed the river, the bed of which is so contracted between steep rocks that trees can be thrown across it; and a little farther down they halted to construct a bark for the purpose of conveying part of the company and the baggage.

After this, the course of the stream was naturally followed, the vessel impelled by the current keeping them company, until Orellana separated from his chief and the main body of men, and finally emerged on to the Amazons, which he still has the fame of having discovered.

The territory to the eastward of the Ecuadorian Andes, and it would seem, according to some authors, a portion of the tableland itself, included between Quito and the eastern range, was first known to the Spaniards as "the Land of the Quijos," or the "Cinnamon country," many trees of this highly-prized bark having been discovered there.

The first permanent settlements were the cities of Quijos, on the banks of the river of that name (one of the headwaters of the Coca), Mendoza, Sevilla de Oro (now Macas) and Logroño, all founded in the year 1552.* A few years later, the establishment of other towns, such as Baeza, Maspa, Avila, Archidona and Tena, to the north of the Napo, and a number of villages

* Villavicencio.

in the neighbourhood of the Upper Pastassa, Paute and Morona followed.

In forming the settlement to the north of the Napo, no special difficulties were experienced with the natives, but not so regarding the Upper Pastassa and Paute (Santiago) region. Here, immediately the warlike natives, the Jívaros, found that the Spaniards, who had quietly allied themselves with other Jívaro hordes, were commencing to assume undue authority and to oppress them, their independent and astute spirit asserted itself against the infringement of their rights and freedom. The resistance of the Indians was so determined and their threats to destroy all the settlements, if found in any way a further source of molestation, so demonstrative and urgent, that numbers of the Spaniards withdrew in alarm from the newly founded colony.

This occurred in 1549 to 1551, before the definite establishment of the above-mentioned settlements as cities. But in the latter year the Viceroy of Peru sent a considerable force, both military and civil, to conquer and colonise the territory. At that time the Jívaros of the Paute were in deadly struggle with the Jívaros of Morona; so that the former, the weaker side, when attacked by the Spaniards in addition to their Morona enemies, already their superiors also in numbers, were, notwithstanding a fierce resistance, compelled eventually to capitulate and to enter into treaties of peace with their European conquerors. It was then that in the midst of their territory the city of Logroño was founded.

The trade of the colony, and the abundance of gold, soon attracted settlers in large numbers, so that it shortly became one of the most prosperous and richest provinces of Quito. This felicitous state of affairs continued for nearly half a century; but the severe taxation and oppression of the Indians gradually worked results which the Spaniards, hitherto in all other parts of South America and the West India Islands accustomed to servile humility from the conquered natives, evidently did not contemplate. During their bondage, the Jívaros of the Paute became reconciled to their former adversaries of the Morona, and this re-establishment of friendly relations with a powerful and still independent portion of their own nation, soon enabled them to shake off the Spanish yoke.

In 1599, under the great chief Quirruba, the combined Jívaros fell upon the city of Logroño, which they assaulted, pillaged, and burnt to the ground, killing all the inhabitants—including even the children—and sparing only the young women, whom they carried away. This circumstance is usually cited in Ecuador to account for the frequency of a paler skin being observable among the Jívaros than among most other neighbouring Indian tribes. The Jívaros then advanced upon Mendoza and Sevilla de Oro. The inhabitants of the former town having received notice of the horrible fate of Logroño, fled *en masse* to Sevilla de Oro, where, by their thus consolidated numbers, they were able to repulse the first attacks of the Indians; and before these could

gather sufficient strength by the advent of the army which had marched against Mendoza, and had razed it also to the ground, almost every Spaniard had fled.

Thus short-lived was incipient civilisation and progress in the territory of the Pastassa and Paute. Logroño and Mendoza rose no more; and Macas, having set aside its more pretentious appellation of Sevilla de Oro, continued to exist, as it does to this day, an insignificant and almost inaccessible village of petty half-caste traders.

The Napo region was less unfortunate, or at least declined only considerably later on, and in a less terrible and sudden manner. A number of settlements were established on the main stream, and on the minor tributaries between the Napo and the course of the Coca. The natives, being of a milder and more timid disposition than the Jívaros, were not a constant, threatening danger to the colonists, whose community was further considerably swelled by the fugitives from Mendoza and Sevilla de Oro.

Before a long time had elapsed, missions were established under the Jesuits, who made Archidona their headquarters; and this period seems to have been the most peaceful and prosperous the province experienced, save only for incursions of the Portuguese from the Marañon to carry off Indians as slaves. But the Jesuits, unfortunately, were removed in 1767; and a number of their mission settlements, in fact all those below the mouth of the Coca, which amounted to some

twelve, including those on the Aguarico, fell into abandonment and ruin, so that now not a trace of the spots where they stood remains.

Subsequently, the province was placed under a governor, whose headquarters were at Santa Rosa, a "Jefe Político" at Macas, with whom no possible communication existed from the Napo direct, and a number of "*justicias*" and "*fiscales*" nominated by them from amongst the Indians of each village. The natives, however, in whose midst some few traders from the interior resided in the main settlements, and in transit, were in reality controlled more by the "*cura*" or priest, as he passed from one place to another marrying, baptizing, and organising the festivals of the Church. Even Villavicencio, who occupied the post of governor for some years, confesses that the Indians obeyed the *curas* more than himself; although, he adds, these messengers of peace "usually treat them very harshly, and for the most insignificant causes beat them cruelly."

All the education and order that was slowly and laboriously being instilled by the Jesuits was soon completely lost; and oppression, with immorality, both social and commercial, grew apace. The *curas* were generally worldly and ignorant young men whose only object appears to have been to make their religion serve as a means of gratifying their lust for gain, and of pandering to their passions with impunity.

The festivals of the Church, and its sacraments, were

administered for gold, which was then, as indeed it is usually also now, carefully exacted in advance; and the first-fruits and tithes were collected with an interest unfortunately seldom manifested in matters more positively concerning the welfare of the flock.

In trading with the Indians, the *curas* were, as a rule, hand in hand with the other authorities, and practised with them the iniquitous traffic called "*repartos*"—distributions, or forced sales. All the able-bodied Indians of a village were called together, and a certain quantity of *lienzo* (the coarsest unbleached cotton cloth), knives, matchets, and axes distributed amongst them, *whether they wanted the articles or not;* and within a fixed limit of time, usually extending to a few weeks, the recipients of the wares were compelled to pay the exorbitant values placed upon them by the sellers (*sic*) either in gold or "*pita*," a fibre for which a ready market was found in the large towns of the highlands.

In 1870 or 1871 the missions of the Oriente were again placed into the hands of the Jesuits, in whom also all the necessary civil authority was vested by the President; and in a very short time those energetic missionaries began to re-establish order and suppress abuse. All traders, with the exception of some half-dozen of the more trustworthy, were denied an entry into the province; and in several cases those who had surreptitiously gained an entrance were ignominiously sent back to Quito. There was no special difficulty in enforcing these measures, since the Upper Napo is

practically only accessible from the Quito tableland by two routes, and then only provided assistance can be procured from the Indians to carry the traveller's baggage, and to supply him with provisions. Thus, by forbidding such aid from the submissive natives, the missionaries kept free communication from Quito practically closed. Whether this system of isolation were a good one or not it is unnecessary to discuss; but if the object was to reclaim by degrees the impossible Indian to habits of civilisation, this exclusive policy was not perhaps so likely to miscarry as at first appearance it might seem. If, on the other hand, the development and exploitation of the country were the object, it doubtless could not be sooner brought about than by encouraging an influx of civilised inhabitants. But on this stream the lowland Indian would, as all experience shows, be assuredly carried away, and finally perish altogether.

At the time of my visit, the Oriente was still under the Jesuit *régime;* but since the death, by cowardly assassination, of the brave President Garcia Morena, a relapse to the former lax administration cannot come unexpected.

Before closing this brief acquaintance with the past of the Oriental Province, through whose dense forests we shall wander, dallying at what we see of most prominent interest on our way, a few words must be said about its inhabitants, with whom we shall also have to communicate and sojourn. These are composed

throughout of pure Indians of many distinct tribes, the majority of which will be specially referred to further on as we pass through their territories. It will suffice here merely to state that they are divided, or rather, may be divided, into two great classes called by Ecuadorians "Indios" (Indians) and "Infieles" (infidels, heathen). The "Indians" are Quichua-speaking, salt-eating semi-Christians; the "infidels," named by the others "Aucas,"* speak distinct languages, eat no salt regularly, excepting some of the Jívaros, and know nothing of baptism and the Catholic Church.

In case, however, the account of one traveller should seem dissonant with that of others, let us digress a moment to reflect that in considering the life and customs of savage tribes, their peculiarities can probably often be more truthfully portrayed by the description of typical individuals than by any attempt at collective delineation of their habits and manners as a people. Though all have many points of resemblance both as individuals of a tribe, and as detached members of a certain stage of primitive civilisation, hard-and-fast social laws cannot in either case be laid down. For apart from the fickleness of the completely untutored mind, which has no faith, no abstract reason by which

* This word, as it is commonly used now in the Oriente, seems to bear the full meaning it did anciently in Peru under the Incas. It includes the sense of *infidel*, traitor, barbarian, and is often applied in a malignant sense. In Peru it was used to designate those who rebelled against their king, and incarnation of their deity, the Inca.

to govern its apprehensions and waverings, the low savage is essentially independent; restrained from his infancy upwards by no law, by no guiding hand, and even frequently barely by custom, or at least only so far as in his own dull mind no divergence from usual custom happens to suggest itself. Then again, the social bond is so weak that the nearest blood-relationships in many cases hardly form either a link or hiatus, as in a more advanced state of society.

The very conflicting accounts of different travellers are doubtless in great part attributable to these considerations being frequently lost sight of; and they sometimes in truth divulge much more the frame of mind of the narrator than a correct and dispassionate picture of the subject. It is so difficult for an intellect prejudiced, if the paradox be admissible, by the restraints of education, religion, and observance of rigid custom or law, to fathom the motives of the savage, that antagonistic testimony is not to be wondered at. But it will often be found, if the narrator's point of view be clearly weighed, that instead of conflicting, many varying accounts are quite compatible with one another, but are merely incomplete.

One of the main causes of our misapprehension of savage character, and the apparent anomaly of its actions, is not that we cannot fathom or understand its motives, but that we try to sound where there is no depth. The very shallowness of reasoning and the shortsightedness of incentive are so extreme that we

can hardly grasp them as reasoning or incentive at all. Error of judgment though is not always on this side, and this is one of the further incongruities of purpose in the savage. He may sometimes act with an object so remote, or at least connected with his immediate deeds by a chain of reasoning so subtile, or on the other hand sometimes so hazy, as to be quite undiscernible to us. In contemplating the savage, be it in his home or in books, when we ask ourselves why he does this or that, or how such and such a custom was established, the answer may in most cases be sought either in the simplest reason of some immediate necessity, or in the vaguest superstition evolved primarily from the most ordinary natural phenomena, chiefly physiological or astronomical.

CHAPTER V.

FROM BAÑOS TO THE TOPO.

FROM Baños the journey was on foot and we set out with sixteen men to carry our baggage to Santa Inez, leaving the "Eastern merchant" behind to come forward later on with the peons engaged at Peliléo. I was very weak and unwell at the start, and had been ailing since our arrival at Riobamba, so that I hardly expected to be able to walk at all at first. After the stone bridge of Agoyan, the only structure we had yet seen on our road that could properly be called a bridge, I was compelled to give in, and stopped at a hut to ask for something to serve as a restorative. I procured from the simple natives a decoction of "*Yerba Luisa*" (lemon-grass), which gave me considerable strength to continue the road.

Almost all the day we had to advance through deep mire and water, in open swamps or thick woods with mud up to our knees. The mire was full of stones, broken snags, and all sorts of hidden obstructions to make it the more impassable.

Occasionally we came across landslips, which the recent heavy rains had caused, and which had carried away all the loose vegetable earth from the mountain-side, with trees and everything upon it all hurled down to the river below; and as in such places the track was obliterated, passing them was very difficult over a footing of steep, slippery and muddy rock. Serious obstructions were also formed by large fallen trees across the path, to be scrambled over in the best way possible.

The porters had set off two hours in advance of us, and how they got through the fearful roads we met with, having each a load of eighty pounds upon his back, is marvellous.

All the time we were following the Pastassa valley, skirting along the hillsides of the left bank, from the breaks in which numbers of beautiful cascades fall to swell its waters. In one place, Autumbós, four large ones are to be seen close together.

The finest sight, however, is the Fall of Agoyan. The river is here compressed into a narrow rock-bed, and falls through a crevice of only about fifteen feet in width, a little towards the left bank, some 100 feet below. The spray, which is thrown up in jets, in form as I have only seen in artificial rain of fire, has worn or scooped out an enormous conchoidal cavity, which goes under the side of the fall a little towards the left bank, and the mossy darkness of which contrasts beautifully with the whiteness of the spray and the foaming water.

With hard up and down hill work, we reached an abandoned and burnt "*hacienda*" called Rio Verde, named after the torrent which at this spot falls into the Pastassa. The stream is called Verde on account of the green colour of its clear waters, which rush through a bed of dark, hard lava similar to that of Tunguragua, though this lava stream must have proceeded from some unknown volcano in the Llanganati mountains.

Being already near sundown as we came to Rio Verde, we naturally expected to find our carriers lodged under one of the large abandoned sheds still standing there; but we were disappointed and had to resume the march, already far too long and arduous to be pleasant to me considering my weakness and indisposition. The bridge of two large trees thrown across a narrow in the torrent, whose beautiful, pale and delicately tinted water sped foaming underneath us, was crossed, "*à la* Blondin," and we entered the forest on the other side, whilst heavy rain began to descend and night fast approached. On we hurried, though every quarter-of-an-hour I was compelled to stop and sit a few minutes on the wet ground to regain my scant breath; and after walking and resting for two hours more—to me an endless time—we came in sight of a light which we joyfully hailed, soon approached and found to proceed from a large fire, round which all our men were seated drying themselves in an open "*trapiche*" (sugar-cane mill) of a cane plantation called

Machai. I was too much knocked up to eat anything, so again drank only an infusion of lemon-grass and lay down to sleep. During the last two hours in the forest, after dark, we many times made solemn declarations that we never in the future course of our lives would remain in a thick wood at night without knowing the direction or distance out of it, unless of course accompanied by our baggage, provisions and means of protection.

The next morning we started again at about eight o'clock and still continued to advance through dense forests the soil of which, although mostly steep undulations, consisted of deep mud. One swamp had to be passed which was terrible: we sank into the mud and water fully three feet—even more in some places—frequently finding the greatest difficulty in drawing one leg out without planting the other inextricably in. Thus we struggled through and over the ground and the slippery trees and logs, both sunken and on the surface, falling and floundering almost at every step. The day's march fortunately was not very long, and I rested half-way whilst Mr. Sarkady returned for his watch which he had left behind at Machai. We arrived at the long-wished-for Santa Inez soon after four o'clock. It is a spot now pretty well known to entomologists as the chief haunt of the clear-winged butterflies *Ithomidæ*, and is the Land's End of civilisation on the Upper Pastassa.

In leaving Baños we had left the last civilised (*sic*) settlement of note, and following the river downwards

we find the sugar-cane *haciendas* of Agoyan, Autumbós, Rio Verde (abandoned), Machai, Mapóto and Santa Inez. Passing the latter towards the Marañon, there are no habitations but of Jívaros and other pure wild Indians.

The Santa Inez estate being situated in a part so remote, and whence the transport of its produce is so difficult, it can easily be imagined that it is not a flourishing plantation, and its house and *trapiche* (cane mill) sadly wanted repair. This neglect has arisen firstly from the carelessness of its tenants, and later from its owner's attention having been directed more particularly to the extraction of chinchona bark from the forests farther down the river, in which employment the labourers were occupied to the detriment of the cane cultivation.

The buildings of Santa Inez stand in a portion of the ancient bed of the Pastassa. The river here seems always to have been retiring towards its right bank, for, commencing on the left, about a quarter-of-a-mile behind the houses, we find a water-worn embankment, some fifty feet high, covered with thick wood at the top; next, a step lower advancing towards the right, is about a quarter-of-a-mile of plain composed of shingle, but covered with a layer of vegetable earth, now under cultivation. Upon this the houses stand.

Passing farther to the right we come to another perpendicularly worn bank of shingle, already with high wood on its more elevated portions, and a low growth of some kind of willow bushes on the remainder.

Beyond this flows the river, when not in flood some ten to twelve feet below, held in its bed on the other bank by precipitous rocky hills. About half-a-mile above Santa Inez, the first high bank—and the hills above it—close in right up to the river; and again a short distance higher up the bed opens at Mapóto, almost all the *haciendas* named being thus situated in lateral extensions of the valley or ancient bed of the river.

Below Santa Inez the bed also closes gradually. The second bank enumerated runs close up to the stream, and a little beyond, the first high one also approaches; so that just before reaching the Topo, about six miles distant, but one steep hill forms the left bank. The condition of the ground clearly denotes the recent stages of the formation of the river-bed not to have been gradual, but to have been brought about by sudden and powerful floods, a theory quite compatible with similar results produced by the great floodings (*reventazones*) of some of these rivers at the present day. It is, however, quite possible that the apparent successive depression of the river-bed may be owing *in part* to elevation of the land.

We remained at Santa Inez about a fortnight, during which we daily issued forth to wade through its quagmires, in the woods and along the river in both directions, in search of game and butterflies, which exist there in great numbers; and although we had not more than two fine days, and three more on which the rain was not quite incessant, we caught a large number

of species or well-marked varieties of *Ithomidæ* (a butterfly of the clear-winged description), besides other genera.

In our shooting we were unsuccessful, and got only a few birds and a fine puma, which the men of the *hacienda* voraciously devoured, meat of any kind being a great delicacy to them. Out of curiosity, more than from a special desire for flesh, we also took "lion soup" and tried the "best end of the neck." We found the chops very tough, but possessing a very white, nice-looking meat, with no strong taste. No doubt the cooking had a good deal to do with this, though; the meat was boiled a long time and the water changed once to eradicate the cat flavour. Peccaries were about in large numbers between Santa Inez and the Topo; and we frequently tracked them, but unfortunately always without success. One day the rain set in so heavy and constant that there were no butterflies about, so we dedicated our time entirely to following some quite recent tracks, cutting our way through the thick wet woods, which are here full of patches of the thorny bamboo, the worst of all thickets to penetrate, and which must be known to be appreciated. It is worse than any of the thorny palms, bad as they are. The most annoying part of the matter was, however, that all the day's labour was lost; for we did not come up with the pigs, and had to continue in our scarcity of meat, one of the dogs having eaten the only piece of so-called beef—more like tanned hide in reality—brought from Baños, salted and dried. The wretched cur succeeded

in tearing the relish from its hanging-place in the night, at the risk of falling over a high balcony. Instead of wild pig, however, we came, a few days afterwards, by a tame one which belonged to the "Mayordomo," and which, with great self-sacrifice, he kindly sold us, at our repeated instances to that effect, at three times its value.

With what pleasure did we have him—the pig, not the Mayordomo—killed, and watch over the proceedings with his precious carcase; and with what elation did we bring our culinary talents to bear upon the curing of his hams, and the preparation of one of the dishes we thought of entering in the *menu* of our contemplated work on cookery for travellers! An owl we shot one day was also demolished by our servant and the peons of the *hacienda*.

At the expiration of the fortnight passed at Santa Inez, I had perfectly recovered my health and strength, probably in some measure owing to the freedom enjoyed from the fleas and other vermin of the Sierra, and the comparative peace of mind and composure of liver and spleen resulting from our separation from the irritating interestedness and mean character of the commoner people of Baños, where pretensions to civilisation exist, yet none of its better influences are apparent, nor its advantages felt in any form.

The men I had engaged at Pelileo arrived punctually to their date, and all became bustle and excitement preparing the loads and arranging their provisions upon them, covered with leaves to keep off the rain. Each

load had to be weighed, and the excess over two *arrobas* (fifty pounds) paid for according to contract. By half-past one the party was in marching order; and each man sat down on the ground with his back to his load, adjusted the bands of plantation-stalk across his chest and forehead, struggled to his feet, and the procession advanced. Its members were as follows, besides Mr. Sarkady and myself; twenty-nine persons in all:—

Mariano Medina, Mayordomo and interpreter,
Eliseo Medina, his son,
Ezequiel, Juan } servants,
Andres Moreno, captain of the peons,
Luis Moreno, senior,
Luis Moreno, junior,
David Moreno,
Manuel Paredes,
Ambrosio Ramos,
Narciso Cortés,
Camilo Gomez,
Baltazar Castro,
Juan Ramos,
Jesus Losada,
Juan Salan,
Alberito Lluvia,
Camilo Chicaisa,
Miguel Chicaisa,
Manuel Lopez,
Hermenejildo Carransa,

Juan Castro,
Gabriel Paredes,
Martin Ramos,
Manuel Vargas,
Tomas Ramos,

and a boy carrying some of the peons' provisions.

The road, always close to the river, though not invariably in sight of it, brought us to the Topo at about four o'clock. Part of the route, we had to pick our way through the woods higher up from the bed of the river, as the usual path was under water at the time, forming part of the furious and swollen Pastassa. A few days previous we had endeavoured in one of our excursions to pass by the lower passage, but found ourselves getting gradually and unavoidably into the river with an inaccessible shingle wall above us, so that we were compelled to retrace our steps a long distance. We were in great risk of being washed off our feet, and this did actually occur to me, placing me for a moment in imminent peril of being carried down-stream amongst the rocks and rapids.

At the Topo we found the *taravita* erected by Messrs. Lizarzaburu for the crossing of their bark, and which they had kindly given orders should not be removed until we had effected a safe passage across this dangerous torrent.

A "*taravita*" is the old native Peruvian bridge, consisting of a rope stretched over the stream, at a considerable height above the water, with a loop, also

of cord, hung upon the two extremities of a forked branch thrown over the rope. The passenger sits in the loop, and is pulled dangling across the stream, or works himself across hand over hand. Cargo is firmly tied in the same position, and hauled from side to side by a thinner cord attached to the fork. Of course to pass thirty persons and an almost equal number of loads, one by one and securely fastened, is almost a day's work; so we saw it was useless to attempt to cross that day before dark. The tent was therefore pitched on the wet, mossy and muddy bank, rain pouring down heavily since we had got half-way from Santa Inez to these inhospitable shores. The river was much higher than we had seen it on our previous visits, and by the ordinary method we should not have been able to pass it, *i.e.* by throwing trunks of trees across from rock to rock.

A few words must be dedicated to the Topo, as it is the most notorious affluent of the Upper Pastassa, and has caused trouble and danger to many. It forms the most dreaded barrier between the east and the west; and is truly the Rubicon of Ecuador for travellers to the "Provincia del Oriente." For the Napo, and even for Canelos, traders mostly descend *viâ* Quito and Papallacta, the only other available route, solely to avoid this torrent; though on that road is the Cosanga river, not much less to be feared.

On the Topo the rise of the water is sometimes so sudden, that small parties of traders with their peons

have been separated whilst crossing it, and sometimes imprisoned between it and the Shuñi (or Zuiñag)—another torrent flowing into it just before its fall into the Pastassa—for two or three weeks together, without possibility of effecting an exit in any direction, and without any food but the roots and berries of the forest.

The Topo rushes, or rather springs, down its bed at a frightful pace; and as it is filled with unevenly-dispersed boulders and rocks in mid-stream and in all directions, besides its irregular perpendicular banks of similar solid material, the rush of the waters can be imagined when they rise so as to almost cover the highest of the rocks in its centre, passing at a rate of some twenty miles an hour, and dashing their foam and spray thick and high up into the air. It reminded me vividly of Schiller's description—

> "Es wallet und siedet, und brauset und zischt,
> Wie wenn Feuer mit Wasser sich mengt;
> Bis zum Himmel spritzet der dampfende Gischt,
> Und Well' auf Well' sich ohn' Ende drängt."

only that no diver could possibly have come out to spring into it a second time.

Of course the thought of crossing such a rapid in any way but quite out of the reach of its waters could not be entertained. I had heard much about the Topo; but my imagination never pictured so imposing a spectacle as it appeared the next morning when we turned out, after a wet, stormy night. The waters, to our astonishment, had risen over six feet above their already

high level the day before; and much of the spray, and even the head of the crests thrown up from one boulder, reached our suspension bridge high above. Crossing was therefore impossible, as the elasticity of the imperfectly-stretched rope, with the weight of a man in its centre, would have lowered him right into the thick of the flood as it dashed past. During the wretched rainy day spent on the right bank anxiously awaiting a fall of the tide, we had ample time to call to mind the warnings we had received as to the difficulties to be encountered in this season of the *nevadas*. However, these were again forgotten, for the time, the second morning, when the river had again fallen six feet, to the level we had found it on the evening of our arrival.

This copious precipitation of water down the torrents and rivers of the eastern slopes of the Andes, is owing, in Ecuador, to their precipitous formation and to the presence of gorges and cuttings high up, which fill with snow; and in the season of heavy storms and thaws great masses of melting snow are all at once voided, thus descending like an avalanche promptly liquefied by the higher temperature it encounters and the abundant admixture of rain accruing from every rent and slope. Doubtless in colder climates true avalanches, and in some cases glaciers, would be produced by similar causes.

The greatest and most devastating floods have been caused on the occasion of some of the great volcanic eruptions with exudation of lava, the heat of the fiery

stream suddenly melting huge masses of the snow and ice through which it cuts its way, causing inundation of large tracts of country and the rivers below, as has especially been the case with Cotopaxi.

The often disputed question whether such extensive floods on all sides could possibly proceed from the snow and ice on the mountain is now at rest; and it has been explained that in Ecuador the so-called "eruptions" of mud and water have not come from the interior of the volcanic cones, excepting in so far as other ejecta must carry with them a certain quantity of the snow and ice that may have accumulated in the crater, but which is doubtless mostly converted into steam. Dr. Wolf* clearly demonstrates, in refutation of the theory that the snow and ice on the mountain would be insufficient to account for such floods as have occurred, that the small channel cut through the accumulated layers of ashes and frozen snow by a single lava stream on Cotopaxi, would furnish quite sufficient material for the inundations that have taken place; and that if all the snow were to melt at once, as is popularly supposed to have occurred when the mountain has really only become darkened by fine ash and scoriæ falling upon it, the entire country for miles around would be completely devastated.

* 'Chronicle of the Andes.'

CHAPTER VI.

FROM THE TOPO TO THE PINTUC.

Now came a busy time: firstly, a few men crossed by the "*taravita*" or "*puente de maroma*" (acrobatic bridge, as the peons call it), to receive the chattels on the other bank of the torrent, the remaining ones packing up the tent, cooking materials, &c., and fastening package by package to the hanging loop for transmission to the other side. Only one mishap occurred, fortunately without bad consequences, but which might have terminated fatally. The *taravita* was formed of two main ropes, one of which was old and weak, and just when the captain of the peons was suspended in mid-stream it broke! For a moment, as his whole weight was suddenly precipitated upon the other rope alone, it stretched and he sank as if falling into the seething waters. However, fortunately the remaining cord held, rebounded upwards again, and the man crossed in safety, only the worse for a fright. Fortunately the broken line was long, so we chose the best portion of it and readjusted it across the stream, care-

fully stretched equally with the other so that the strain should be more fairly divided between the two than before.

By the time we were all safely landed across the Topo, and had reached the Shuñi, it was already too late to pass that river before dark, so we settled for the night on its right bank, thinking how fortunate we had been to have had a *taravita* to cross the Topo, as without one we might have been detained for an unlimited time at such an unseasonable time of year.

As during all the journey from here to the Napo, on foot, every day was conducted under more or less similar arrangements and routine, it will perhaps not be amiss to give here an idea of each day's division of labour.

As soon as day began to break we called the servant Juan to get up and make the fire for breakfast, and in the meantime we rose ourselves, and placed the necessary rice, *yuca*, potatoes or plantains—whichever we possessed—to boil, with meat when we had any. After this a little plain boiled sago, or a cup of chocolate, was taken. All the provisions were used very sparingly, in case of unforeseen delays occurring later on. The meals of our peons consisted solely of "*mashka*" (a coarse barley flour) and pea-flour, nearly always eaten in the crude state. Just a few handfuls are thrown dexterously into the mouth three or four times a day at the halting-places for a few minutes' rest on the march. Only at night they occasionally boiled a little flour in plenty of water and then added a little salt to

it. On the road the peons eat absolutely nothing else for days together, and on such short rations do their work wonderfully, like horses impatient to finish their task and get into the stable. On this fare they seemed untirable; but when well, or rather, not so badly fed, they got lazy and sluggish.

Breakfast towards its end, tents, cooking utensils, camp-beds, &c., were repacked, and the march resumed at a good round pace, without any further meal till after nightfall.

Some of the men, whose loads had not been unpacked, generally started half-an-hour before us and the remainder of the band. Stoppages were made at regular "*descansadas*" (resting-places) known to the peons and usually about an hour's distance from each other. At these spots all sat down on the ground for about five minutes to smoke or chat and regain their breath, the walk being then invariably resumed without more loss of time than the prescribed four or five minutes; for the men most reasonably held it undesirable to allow their bodies to get cool and the muscles to relax while on the march.

Our halting-time for the night varied much, according to inclination. Sometimes the day's work was finished at four, and on one or two occasions even at three o'clock, when any specially attractive spot was found for a camping ground. At other times we continued until almost dark, when no desirable locality presented itself, or when no good stream of water was at hand,

which however only once occurred and obliged us to go on till after dark.

Upon halting for the day, axes and *machetes* (a long sword-shaped knife) were immediately brought into requisition for clearing a space in the undergrowth for the tent, for the flooring of which large palm leaves were cut. Whilst some of us were busied with this, others collected a good stock of firewood and built the different "*ranchos*" for parties of five or six together.

The "*ranchos*" are constructed of a horizontal stick tied upon two upright ones with *lianas*; and large palm fronds are then thrown across it with their stalks stuck obliquely in the ground, forming thus a sort of water-proof shed. The closed side is of course placed to windward, though in the thick forest there is little to fear from driving rain, as the heavy vegetation above causes it all to fall vertically below. Under these shanties the men sleep on leaves spread on the ground, all the undergrowth and the soil being incessantly damp from the impenetrability to the sun's rays of the heavy creepers which are woven like a dense canopy over the tops of the trees.

Our encampment consisted of two tent sheets stretched overhead and three or four "*ranchos*" for the peons, and at night presented a pretty and picturesque spectacle, the bright fires before each shanty giving a most cheerful contrast to the dark, gloomy and wet forest.

Very soon after night had fairly set in and all the human voices were hushed around in slumber, I usually

remained quietly smoking by the fire, arranging and putting away the butterflies captured during the day, making entries in my note-book, or reading Shakespeare by the light of a lantern. These moments at night were most enjoyable, and will leave a lasting impression upon my memory. The impenetrable gloom of the virgin forest; the fantastic shapes of the nearer trees, palms and thick heavy creepers, lighted up by the bright but fading fires at small distances and in different directions, and shining like sparks through the thick foliage; the hum and buzzing of myriads of insects; the superlatively mournful song of the night birds—one a perfect minor-scale of five notes; the mellow clucking of a species of opossum; the deep, suppressed whistle and see-saw humming of the jaguar; and to this added the manifold cries of the frogs, which vary from high-pitched screeches and human-like screams to the low, hoarse bark of a huge mastiff, all tended to produce on the mind an indescribable feeling of weird solitude, notwithstanding the noise they created.

My hour for retiring to rest was usually between ten and eleven: the peons and others always slept soundly soon after dark, which in these latitudes commences all the year round soon after six o'clock. Before throwing myself on my camp-bed, I always placed a rifle at hand, so that at a moment's notice I could use it if necessity should arise; and I then carefully noted the bearings of the other *ranchos*, in order to avoid aiming in their direction in any hurried emergency. This precaution

was taken principally against the jaguars, which are at times most daring in their attacks.

To return, however, to the narrative of our progress: we were encamped on the left bank of the Shuñi—a river similar to the Topo, but not nearly so dangerous and impassable, its current being somewhat less formidable, and the boulders in its bed less obstructive in size and the disorder of their position.

At about seven o'clock all was ready for crossing. First a small part of the stream had to be forded through a very strong current, which brought us on to a boulder in the middle; and great care was necessary in these few steps, with the support of a long staff, to avoid being washed away by the stream. Next came the bridge proper, constructed of the stem of a strong tree cut down for the purpose, and dexterously dropped across from rock to rock. First one of the peons crossed this *à la* Blondin, at which performance they are adepts, and then another similar long trunk was thrown across alongside the first, to make the bridge safer and easier for the passage of the baggage. A slender stem was next placed upon the shoulder of a man at each extremity of the bridge to form a balustrade, and the whole party, one by one, crossed to the rock, from which the left bank of the torrent was reached by another short and rather deep piece of fording.

The road hence was of the worst description. No two consecutive steps were on the same level, and, most of the way roots of trees, and trees themselves,

had to be climbed up and scrambled over with hands and feet, as the only means of scaling the almost vertical hill-side. In many places the road was impassable even for the dogs, and they frequently had to be lifted. The term "roads" is indeed in these parts only fairly applicable as signifying tracks for tiger-cats and monkeys, inasmuch as domestic animals cannot pass them, and man solely when putting the mode of progression of quadrumana into practice—using both hands and feet.

That day we walked only six hours and a half, nearly all the time mounting the same "*cuesta*," Habitagua, and upon reaching a desirable halting-place we stopped for the night, though the summit was not yet attained. We were, however, all glad to rest after a day's work which had been short, but in which literally every step had been an effort.

The following morning, two hours and a half further steady ascent brought us to the top of Habitagua, about 6015 feet above the level of the sea. Upon this eminence we continued for a short distance along a ridge, and got to the south-eastern side of the mountain, where we rested to feast our eyes upon the magnificent view stretched out before us. To an immense distance, until entirely lost in the haze, flowed the Pastassa, winding like a silver thread through the green velvet of thick vegetation, or bordered by hills and undulations all dressed in the same verdure. It is said by the natives that from this spot the peaks of Bolivia can be

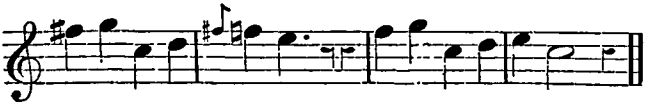
seen; but this is of course an absurd exaggeration of the vast extent of the view. The fine clear day which we were fortunate in having, rendered the outlook exceptionally beautiful, and we remained contemplating it for a short time. The descent was then commenced, and its steepness was such that in many places we had to climb down as we had climbed up. At the foot of Cerro Habitagua flows a pretty torrent called Quiluc, and on its other side, the left bank, is a hill of the same name. We ascended this a short distance, and, finding a small, level and comparatively dry spot in the woods, under very large trees, made a clearing in the lower vegetation and encamped there. The night also passed without rain, which began to raise our hopes that the entrance of summer might be approaching.

A few minor hills follow the Quiluc, but at length we descended on to the level land of Barrancas (3955 feet above the sea-level), a most pleasant change after so many steep ascents and declivities. Along this plain of alluvial muddy soil, on the borders of the Pastassa, and clothed with high wood and palms in profusion, we came to a lovely stream of crystal water, called Aspayacu (earth-river, or water), which was forded. On its left bank the same level woodland continues. The comparative absence of undergrowth added greatly to the agreeableness and relief of marching on level land.

The soil was very damp, although, according to the opinion of all our men who knew the ground, it could

not have rained for a couple of weeks, an extraordinary thing for the time of year. All the ground in wet weather was a fearful swamp, and even after such a comparatively dry period, it abounded with *cienegas*, bogs, or patches of mud of great depth, into which the whole body would sink, were it not for the sticks and logs thrown over them, and which have to be traversed like floating bridges, with great difficulty to avoid slipping on either side. In many places the logs, or long straight tree-stems thrown on to the morass, were just under water, or slightly buried in the more liquid layer of mud at the surface, so that particular caution was necessary in assuring each footstep on the hidden and slippery support. To wear boots here, as in the forest generally, is out of the question, and on these and other slippery log bridges they would be positively dangerous. We wore *alparagates*, a sort of sandal, the sole of which is made of plaited aloe-fibre. They let in the water, of course, but also let it out freely, which is an advantage not possessed by boots, the best of which are either much too heavy, or are ruined in a few days in the tropical forests of the Andes.

At four o'clock we encamped, having walked very hard all day, on a spot covered thickly with little else but palms, mostly the "Tarapoto," which supplies an agreeable vegetable, comparable to young celery, from the inside tender shoot in the centre of its crown. Fresh tracks of numberless tapirs, jaguars, peccaries, and deer abounded in every direction.

Here I first heard the song of the "*flautero*" (flute-bird), among birds the mellowest and most beautiful songster that I remember having heard. His song is not quite the same in all individuals, but may be likened in tone to the most mellow, sweet-sounding flute; and the musical correctness of all his notes is astonishing and makes one imagine the sound to be produced by human agency. On one occasion, after this, I was utterly deceived, being out in the woods. I felt certain of being far from all my companions and other human beings, when I suddenly stopped, hearing, as I thought, someone with a knowledge of music whistling charmingly and clearly quite close to me. But I suddenly remembered the *flautero*, and espied my little friend singing his song, which ended on the key-note, thus:—

He is a very insignificant-looking, little, greyish-coloured bird; and, I was informed, always dies in captivity. He dances and performs strange antics before the female during his song.

Another hard day's walking at a good round pace, and without more than about ten minutes' rest, brought us to a clearing in the wood—quite a relief after so many days under its heavy and sombre foliage—where stood the houses and plantations of some Jívaros, near the river Pintuc (or Pindo), which, with the waters of

the Puyo, flows into the Pastassa a little farther down, on its left bank.

Half the road of the past day's march had been over fallen trees and slippery logs across the swamps and *cienegas*; but we had got over a greater distance than the ordinary *jornadas* of our peons, although we had completed the day's work at half-past four o'clock. The prospect of reaching human habitations again, and of such an interesting people as the Jívaros, had made us push on faster than usual.

The house to which we bent our steps was a large one belonging to an old Jívaro named Namúco, whom we found at home with some nine or ten other men and women who were living in the same house. We were well received, our men immediately on arriving having represented us to the Indians as *jatun apos* (important personages), with offers of hot roasted *yuca* and boiled plantains and fish, prepared in the favourite Indian manner, namely, wrapped in plantain leaves and steamed with a small quantity of water—a method far superior to boiling. Very acceptable and delicious did we find this meal, which we could set upon at once without the usual toil of pitching the tent, gathering firewood, unpacking utensils and cooking our own food.

After resting a while and looking about us, we placed our tent just outside Namúco's front door, our followers settling inside his spacious abode. All the arrangements of tenting, beds, cooking-apparatus, arms, &c., were looked upon by the Indians with great curiosity, and

called forth not a few sounding "clucks" of satisfaction and admiration. Our host came out and formally visited us, presenting another large plantain leaf filled with fresh uncooked fish—all very small trout and other diminutive fry, which we prepared like whitebait for dinner, with sweet potatoes and plantains.

What a grand and festive spread was this, with the addition of a fowl, after our miserable and scanty fare of the past three or four weeks! I ate so much—shame be upon me for having to make the confession—that I could hardly stand or speak for a short time after we had dined!

CHAPTER VII.

THE JÍVAROS.—FROM THE PINTUC TO CANELOS.

THE tribe or family of the Jívaros is a large one, and one of the most distinguished, independent and warlike in South America. They alike withstood the attacks of the Incas and the Spaniards, as already mentioned in a previous chapter, burning the once-famed cities of Logroño and Mendoza, and massacring all the male inhabitants who did not succeed in making their escape; and even to this day they maintain the most thorough independence. There are missions at Macas and Gualaquiza, but they have as yet produced no practical results, nor obtained any authority over the Indians. A Jesuit *padre*, who had resided three years at Gualaquiza amongst the tribe, informed me that he had found it impossible to make any progress with them; and more than once his life was personally threatened. During those three years twenty-nine whites (*i.e.* half-caste traders) were killed by the Indians in the neighbourhood of Gualaquiza.

The Jívaros speak a language of their own—Jívaro—

and occupy the country generally from the Upper Pastassa to the Santiago, both rivers included, down to the Pongo de Manseriche, on the Marañon. Most of those, however, at Pintuc understand and speak Quichua.

Their houses are large and built of "*chonta*" or "*tarapoto*" palms split in two, and standing vertically in the ground, close to each other, like a blockade, the principal stakes for supporting the roof being entire stems of the same palms. The roof is composed of rafters of bamboo, and thatched with interwoven palm-leaves, principally "*yarina.*" The ground-plan of the house is shaped like a bagatelle board, square in front and round at the back, with doors at both ends.

The dwellings are very spacious inside; and the even plaiting of the high pointed roof-thatch gives the ceiling a pretty and finished aspect. Several families live together in one house, each in its special corner or portion, where it has its separate fire, the earthen pots and other cooking utensils being stored on a sort of tray of split bamboo suspended from above. The way the fires are maintained is very ingenious: three large logs about one to one and a half feet in diameter, and ten to twelve feet long, are placed with their points converging to a centre, at equal angles; and on the approximated inner ends the pot is stood. As the logs are consumed, the fire is fed, merely by pushing them a little further in towards the centre; and if a stronger fire is required, smaller wood is thrown on the always

red-hot and smouldering ends and fanned for a few moments with a fan of plaited grass.

The Jívaros are hospitable; but are, like most others of their race (and perhaps ours too), very fond of giving little so that they may receive more. However, a traveller, immediately he arrives, is always offered refreshment in the shape of boiled *yuca*, plantain, or whatever may be cooking, and the never-failing "*chicha*," which stands about in every house in very large earthen pots of the "*lotah*" shape.

This chief sustenance of the Indian of these parts, *chicha*, is made of the cassava root (*yuca*), boiled and then partly chewed by the women, and partly mashed, after which it stands to ferment. On the third day it becomes a little sharp in taste, which quality increases as the fermentation proceeds. Its consistency and appearance are much like mashed potatoes; and to prepare it for drinking, a couple of handfuls are taken and worked and kneaded in a calabash of water until well mixed. Then all the coarser fibre, which floats on the surface, is removed with the fingers, and the refreshing and sustaining beverage is in condition for drinking. One naturally, knowing the mode of preparing the beverage, has to overcome a good deal of prejudice before one can bring oneself to drink it; but when once the victory over self has been accomplished, *chicha* will be found both palatable and wholesome.

Polygamy is frequently met with among the Jívaros; but I have not heard of wives being exchanged as the

late Professor Orton, in his work on these territories, says is the case. On the contrary, this tribe—and, I am authoritatively informed, the other hordes also observe the same practice—is of all Amazonian Indians probably the most jealous of its women; and very frequently not only are these not allowed to talk to strangers, but, with Oriental exclusiveness, not even to show themselves, a custom remarkably opposed to the habits of the Záparos, Cotos, Canelos, Orejones of the Putumayo, and Mesayas of the Japurá. At Pintuc it was notorious that an old Jívaro named Huilijinda, who lived close by on the banks of the Pastassa, killed one of the six wives he possessed for inconstancy.

The Pintuc Indians do not come under the Spanish denomination of "*bravos.*" They offer no violence to strangers of gentle purpose; but they ally with their half-brothers the Canelos and Sarayacu Indians against the more aggressive Jívaros on the right bank of the Pastassa and near the Morona, or Paute. They have a most perfect and finished method of scalping by which the victim's head is reduced to the size of a moderately large orange, maintaining tolerably well all the features. Only, the lips, point of the nose, and all the thicker fleshy portions, of course acquire too much prominence. To produce these ghastly objects, the skin is cut round the base of the neck, and the entire covering of the skull removed in one piece. This is then dried gradually by means of hot stones placed inside it, until the boneless head shrinks to the required size. They also

wear their slain enemies' hair in long plaits round the waist.

Their arms are the spear of "*chonta*," sometimes furnished with an iron head, and "*bodoquera*," or blow-gun, for smaller game and birds. Some use shields.

The Jívaros practise a system of telegraphy, which has at all times been very dangerous to their adversaries in war, by giving strokes on the "*tundúli*," a large drum, which is heard from house to house, and passed on from hill to hill. The houses are all over their territories at convenient distances for the purpose; and in this manner varied information is conveyed in a few moments to all the families of hordes dispersed over a large extent of country. This no doubt formed one of their best means of defence against the Spaniards; and it is still a main source of protection to these Indians, as they can rouse large numbers on very short notice, and sound the alarm through entire hordes.

The Jívaros are regular workers, and do not pass the whole day in idleness like many others of their race. They issue forth to hunt, work in their plantations, build canoes, attend to pig-breeding, &c., regularly every day, returning to the house generally early in the afternoon to enjoy repose in the lighter occupations of scraping lances or darts for the "*bodoquera*," making combs, feather ornaments, &c.; whilst the women, who sometimes go out to work with them, cook and prepare the *chicha* mass—their standard alimentation, and

during their journeys the only one, being convenient and light to carry, wrapped up in plantain leaves.

Amongst the Gualaquiza Jívaros, whom, however, I had no opportunity of visiting, great festivities are held when a child is, at three or four years of age, initiated into the art and mysteries of smoking.* All the family is gathered together; and the eldest member then makes an oration in which he especially dwells upon the valour and glorious example to be witnessed in the lives of the child's ancestors and actual grown-up relations, the number of enemies they have slain, and so forth. The hope is then expressed that the representative of the new generation in the family may follow these meritorious footsteps, and after the manner of his forefathers prove himself a brave warrior. The address delivered, the pipe is then handed to the poor little fellow; and, after he has taken a few whiffs, all the elders puff seriously in turn, and then wind up the proceedings by disporting themselves in *chicha*-drinking, in celebration of the momentous event.

The "*couvade*" is rife among the Jívaros; and at the birth of a child, the mother has to undergo all her parturient troubles outside the house, exposed to the elements, whilst the husband quietly reclines in the house, coddling and dieting himself for some days, until he has recovered from the shock produced upon his

* This strange and interesting custom was related to me by my friend, the Reverend Padre Pozzi, who resided as a missionary amongst these Indians for some years.

system by the increased weight of his responsibilities as a father. This custom is still also in some measure extant in many of the civilised villages on the Solimoens, where, amongst the Tapuyos, and even degrees more approached to white, the father, on the birth of a son or daughter, lays himself in the hammock, from which he will not move on any consideration, to do any kind of work, nor especially to touch any cutting instrument, fearing thereby to exercise evil influences upon the healthy development of the child.

The Jívaros of the Pintuc, and most others, have the habit of vomiting nearly every morning, by the aid of a feather—a practice similar to that of the Piojés of the Putumayo—arguing that all food remaining in the stomach over-night is unwholesome and undigested, and should therefore be ejected. It has been asserted that their remarkable health and prowess is partly attributable to this habit; certain it is that it obviates some of the bad effects of the frequent "gorging" in which Indians after long fasts are so prone to indulge. However, the Piojés, who treat themselves in the same manner, are certainly not more healthy—and less brave—than most other similarly placed tribes. If it is a fact that the Jívaros are generally healthier and more robust than the rest of their race near the equator—more astute and fearless they certainly are—it would seem reasonable to attribute this to the simple fact that their habits of work and rest are more regular, and they are much more provident than other tribes in

keeping themselves supplied with food of good quality.

We continued our friendly relations at the Pintuc and received daily many presents of *yuca*, plantains, sweet potatoes and fowls, presenting the Indians in return with *machetes*, looking-glasses, and beads for the men; and needles, thread and beads for the women. We also procured some of their tiger- and monkey-tooth necklaces and some feather ornaments.

My companion, Mr. Sarkady, photographed the house and our tent, and afterwards twice attempted a group of the Indians; but as they always moved, and a monkey, one of the numerous pets about the establishment, meddled with the chemicals, the result was by no means brilliant.

The "cluck" of satisfaction referred to previously requires a little explanation; and it seems to be an expression common to all the tribes of the Provincia Oriental. It is not produced by a mere "click" of the tongue inside the closed, or nearly closed teeth, but by placing the tongue forward between the teeth, exhausting the air in the buccal cavity, and then suddenly opening the jaws and allowing the tongue to spring back to its normal position when at rest. The cluck usually signifies admiration, satisfaction or astonishment; but it means something more than either of these, and occasionally expresses all of them together. When some other Indians were carrying our baggage later on, if they had set down the load

and had to hoist it on to their backs again, or if they came to a bad step on the forest track, which had to be struggled over or climbed up with exceptional difficulty or strong effort, the muscles were always first braced with a "cluck," as a man might say "Here goes!" before taking a powerful leap.

We left our hospitable, but, I am sorry to say, not disinterested, entertainers on a beautiful, bright day at 9 A.M., crossed the river Pintuc at a rather deep ford about two hours' walk from Namúco's house; and then, leaving the Pastassa bank, still followed a track through the interminable forest, now fortunately with gentle undulations and little mud compared with what we had passed, as it had not rained for nearly three weeks here! However, it poured in the afternoon, and heavily, just as we, happily, had pitched our tent. The next day we were not so fortunate, but got soaked by the abundant showers that fell, which culminated in the evening in a thunderstorm.

The following day we walked seven hours without stopping, heavy rain pouring down all the time, so we got more than drenched, and very muddy. However, whether it rained or not, we always got wet through from the dripping foliage of the underwood in the early morning, and from having constantly to wade through small streams, or follow their course in the water.

We pitched our tent on a long *cuchilla*, just before

reaching a spot in the forest called by the peons Limones.

As yesterday, the track continued along the top of one of those most curious geological formations called *cuchillas* (knives). The name is fitting, for one may well liken them among hills to the upturned blades of knives. The *cuchilla* is a ridge, generally running for a considerable distance, sometimes ten, and even fifteen miles, uninterruptedly, with varying elevation up to as much as perhaps 500 feet from the base. On one side they are generally almost perpendicular, and on the other descend at a sharp angle. The most wonderful part of their construction is their composition, which consists of loose vegetable earth and loam. It was to me a subject of marvel how these blades could be held aloft solely by the support of the entangled roots and vegetation with which they are covered. And this covering is not only the prop of the structure, but also the safeguard of the traveller; for in many places where the blade is only two or three feet broad, it would be far too hazardous to file along it, were not an effective balustrade furnished by the friendly trees, bushes and creepers, which also hide the yawning of the abyss from the eye, and divest the depth of its unsteadying influence.

The formation of *cuchillas* is a matter of great interest. They are probably the firmest portions of the loose vegetable earth deposited by the denuding waters, and their substance has doubtless been stripped

off and transferred to its present position from the more elevated portions of the Andes above them, which by this continual process of denudation have been tending to increase their steepness above and reduce it at the base, by filling up the abruptness of the lower descent.

They are the remaining ridges, bound together by friendly roots, left by the streams which have borne the remainder of the soil into the valley of the Amazon, whence it is slowly but surely reaching its ultimate destination, the ocean, perhaps again to raise its head above the waters and once more form dry land. And the selfsame waters, that denude, tear down and carry off the solid matter of which the mountains are formed, after depositing their freight in the ocean, are again drawn up to the clouds and poured upon the summits and slopes to resume their work of levelling and distribution of the soil over and over again. Thus are the exhaustless forces of nature spent and again stored up to fulfil their endless destinies.

All the territory we traversed between the Pastassa and the Napo at the base of the *cordillera* is crossed by *cuchillas*, and it would be interesting to know if they extend further north and south, or are only a feature of this portion of the Andes.

After three more hours' sharp walking from our encampment on a broad portion of this *cuchilla* we made a very sudden descent to a pretty little river, the Tinguisa, along the course and uncovered shingle banks

of which we walked down stream. Fording the current four or five times, we came to its confluence with the Bobonaza, where we entered the house of one of the Canelos Indians, and were immediately received with the welcome refreshment of fish and roast yuca. We rested a few moments, and then crossed the Bobonaza, which was swollen by the rains and had such a strong current that great precaution was necessary so that we might not be washed away. On the left bank we ascended a steep eminence and came suddenly upon the village proper of Canelos. Its so-called *plaza* first burst upon our disappointed view—I say disappointed because, having heard so much of the greatness and importance of Canelos, and seen it marked on maps in such large letters, we now saw nothing before us save a square patch of weeds and three tumble-down shanties, which turned out to be, one the church, another the *convento*, and the third, on its last legs, the *casa posada*. None of them were anything like their names might imply—venerable old ruins—but wretched abandoned bamboo huts; the church without priests, the convent without door or friars, and the *casa posada* minus host, door, and all else barring a mud floor and a palm-leaf roof, all awry, but under whose hospitable protection our suite were housed, we taking possession of the convent.

The expectations of months were dashed to the ground at a glance. Our guides and peons had spoken to us of Canelos as of a place where we could procure

almost anything we required, in fact, as an important settlement, which quite coincided with our own impression in its regard—the place which still preserved the name of the country where the first Spanish conquerors had found the prized "Canela." But, notwithstanding the very large deductions we had made from the reports we had heard, we were much disillusioned at its utterly deserted aspect. However, we were too unsophisticated in Indian life at a first glance to see far; for, by-and-bye, numbers of Indians presented themselves with their families—whence we knew not—to bring us their offerings of plantains, yuca, and chicha, in expectation of return, or, as they term it, as an "invitation" to us to give them knives, needles, thread and cotton cloth, with ornaments in the shape of beads and small looking-glasses. Canelos has some eighteen or twenty houses, mostly hidden from one another in the bush, and which will probably represent about 150 to 200 individuals, men, women, and children, where at first we had detected none.

Probably since shortly after the time of Gonzalo Pizarro, three and a half centuries ago, no such large train as ours had reached Canelos; and I had much trouble, during eight days' stay, in providing sufficient provisions for thirty men. Only those who have experienced the scant resources of these small Indian settlements can fully realise this, for most Indians, with the exception probably only of the Jívaros, scarcely ever produce more than is sufficient for their barest

subsistence; and their apathy and improvidence is such that, even for this, supplies frequently fall short. Thus any extra mouths to be fed find the greatest difficulty in procuring food of any description. From the first moment I engaged as purveyors all the Indians who presented themselves, by giving each one a matchet, to be paid for in plantains, yuca, sweet potatoes, fish, fowls, and game; and I further contracted as much food as possible with the women, in exchange for beads, fish-hooks, mirrors, needles, thread, &c. This part of the transaction was easy; but afterwards came the difficulty to make some of them keep to their promises; for, though they find it very pleasant to receive payment, they are too lazy to make up their minds to fish with patience, or otherwise to take the necessary steps towards the fulfilment of their engagements. They require much driving and animating; but, without prepayment, will do nothing at all. Necessity is their only incentive to action.

I passed three days indoors, to allow my foot, which had been much swollen for the last five days from a sprain, to get well. It had given me considerable annoyance and pain when walking; but as movement was of course unavoidable, it had been impossible to give it repose on the march.

CHAPTER VIII.

THE CANELOS INDIANS.

CANELOS is situated on the left * bank of the Bobonaza, one of the most important, if not the largest, of the tributaries of the Upper Pastassa, and the Indians who inhabit it are a mixed tribe, in which the chief element is Jívaro. The language spoken is Quichua, but no doubt some individuals also speak Jívaro.

The men are lazy workers; and many of the youths, much after the fashion prevailing in more civilised communities, are given up to dandyism, drink, and trivial loquacity. All are excessively curious, and some even coolly placed their hands in my pocket to find out of what the contents consisted. However, some of the old and more serious men are staid and respectable members of society, though naturally fond, on occasion, of their little excesses.

The Canelos Indians are not so jealous of their women as the true Jívaros and the Napos. They seem

* Professor Orton, in 'The Andes and the Amazon,' says on the *right*; but he never went there.

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to lack many of the good qualities of the Jívaros, but, like them, are valorous and always ready to face wild animals, or to defend themselves bravely against the attacks of the Jívaros *bravos* who sometimes fall upon them. On these occasions they ally with the Indians of the Pintuc and Sarayacu, a village farther down the Bobonaza.

Their fighting is done entirely with the lance, which is their inseparable companion; and all my attempts to induce any of them to part with this weapon were useless. The same reply was always elicited: "Where-with shall I kill the jaguar when he comes?" These spears, as those of the Jívaros, are very well made, of chonta-palm, and generally with a well-shaped iron or steel head, procured from traders. Some men have, however, on one or two occasions, penetrated into civilisation as far as Riobamba with no further object than to purchase a spear-head to their taste. The shaft is gracefully tapered towards the end, and sometimes tastefully coloured.

Amongst all Indians women's rights are at a very low stage of advancement; but amongst the Canelos probably more so than others. With them, as with many tribes, the young male grows up very independent; and as soon as he can run about, rapidly acquires all the habits and vices of his elders. His day is chiefly spent in lolling round about the village, or farther in the woods, with his little blowgun, which he learns to use dexterously from childhood, to the destruction of all

the small birds. He also learns to fish and follow game; and soon becomes an adept in woodcraft, recognising at a glance the slightest trace of a track of a man or animal, the nature of the thicket before him and the trees above him; and, when still a boy, every tree and spot for miles around his home has become familiar to him. Besides this, he acquires that knowledge, almost instinctive in the Indian, of locality and direction, so difficult to understand, but which undoubtedly is acquired by the almost unconscious observation primarily of the position of the heavenly bodies, the direction of prevailing winds, as frequently illustrated in the growth of mosses and lichens, and the bend of trees, the general currents of the smallest streams, a keen scent and hearing, and the closest appreciation of the many minor sources of enlightenment which would escape the notice of any but the most practised woodman. It is marvellous to witness the knowledge an Indian displays (especially the Záparos) in detecting the presence of animals and tracking them without even following *on their trail* half the time, when the unsophisticated can neither see nor hear anything to indicate that game has been or actually is near at hand. For an Indian, the slightest sound, rustle, or the glimpse of the tip of a feather indicates to him at once all the particulars and species of a bird that may be hidden in the dense wood at the top of a tree, through the heavy foliage of which it seems impossible to discern anything.

Once a proficient hunter and possessor of good poison, of which fact the community is made aware by the number of toncan's tails with which he adorns his person—this bird being one of the most difficult to kill, as it is nearly always seen at the tops of the highest trees, and is one of the toughest preys to the Ticuna poison—he finds no difficulty in successfully making his advances to any young squaw to whom he may have taken a fancy; for the ladies there mostly seek, not, as with us, curates, for the better supply of spiritual food for the mind, but those men who are likely best to supply them with ample food for the body, *i.e.* good hunters. In reality, there is little romance in the Indian maiden's preference for the greatest hunter: her *penchant* for him lies in the hard probability that he, above others, will be more likely to provide her with an abundance of animal food.

The wife selected, she is bestowed upon the happy swain by her father; and all the bridegroom is required by custom to do, either then or previously, is to clear the ground necessary for the chacra, a plantain and yuca plantation. This practically almost ends his destiny so far as work and the care of his family is concerned; and for the rest of his life, on the days he has not a special fit of laziness at home or a jollification in the village—such as a wedding, death, the cleaning and weeding of the plaza, the arrival of friends from, or departure to, the Marañon for the purchase of salt and poison, each of which occasions constitutes a drinking

bout of at least three days and nights—he merely strolls into the woods to seek game, which in the neighbourhood of the villages is generally rather scarce. He consequently returns usually unladen; but if successful, upon entering the house, throws his sport with disdain to the ground and himself into the hammock, and haughtily receives the attention of his wife and the bowl of *chicha* which she has chewed and proffers for his refreshment. Every time a stranger enters a house he is barely seated before each one of the women separately offers him a calabash of chicha.

The poor woman leads a hard life; for, apart from the arduous duties falling to the lot of all natural mothers, she has to plant the *chacra*, keep it free from weeds, and gather the fruits—a harder toil than may be imagined—make a regular supply of *chicha*, cook, cut and carry the firewood, and provide her own dress and ornaments. Whenever her husband is drunk, she follows behind him like a dog by day and goes before him by night, fanning a firebrand to and fro to light his path, with the general duty of aiding him to rise each time the ground comes into contact with his lordly head, and assisting him in any other manner that may be requisite. The precedence is given to the better (?) half by night, so that any venomous snake or other vermin lurking in the path may attack her first and not her affectionate husband, and so that she may serve as a lamp to his feet and a light to his path.

When the Indians came almost daily to us, bringing

in large bunches of plantains, yuca and sweet potatoes, the man always walked first, with his lance in his hand and feathers on his head, whilst the wife followed meekly behind, laden like a pack-horse with the fruits, and often a child on her hip besides and another dragging at her heels. I once suggested to some of the men that they should provide their women with some ornaments and clothing, but they evidently took my remarks to be pleasantry.

The favourite amusement seemed to be the beating of the drum, an instrument about eighteen inches long and twelve in diameter, scooped out of a solid log, and generally imported from the Napo where the Canelos and Sarayacus go on foot to fetch them, thinking nothing of walking from Canelos or Sarayacu to Aguano and back only to buy one of these instruments. During the fêtes before referred to, the three monotonous strokes, one long, two short and a rest, are heard day and night; or a solitary Indian, decked in feathers and followed by his faithful spouse, might be seen reeling from house to house tattooing on the instrument which is suspended by a cord from his neck.

My companion, Mr. Sarkady, photographed the "church" and "convent" with two Indians, whom we had great trouble to get to stand with us, as they have the idea that their soul is carried away in the picture. At the critical moment the Indians walked away, and of course quite spoilt the picture; but they soon stopped

and returned to us on our telling them that it was too late, since we had already secured their spirits. They were in some alarm, and the next day came specially to ask again if it were really true that we had taken away their souls.

We made a small excursion in a canoe which we took down the narrow rapids of the river—to me a most exhilarating amusement. As the water was very low and the stream much too strong, we could not return the canoe to the spot we had taken it from, but were obliged to leave it down below and return on foot. The owner of the canoe heard that we had taken it, and came to us the next day greatly perturbed at its loss; but he was made quite happy when we told him where it was and gave him a fish-hook for its hire.

One old Indian, named Marcelino, a sturdy old fellow, was, of the many I have seen of his class, the most intelligent and desirous of acquiring knowledge, and not out of mere curiosity, like his brethren. To his repeated and urgent questions I explained to him how far away my country was, how on foot and in canoe—the only methods of progression known to him—it would take him ten moons to reach it, were this indeed at all possible; how many of its villages contained each more men than all the tribes he knew put together; how knives, axes, beads, *lienzo*, guns, and all such things were to be had there in the greatest profusion, and that even most of these articles which were brought to his country were made in mine. I further

explained to him that there were no jaguars or snakes to destroy one's dogs and children, but only animals useful to man and that served him for food. He must have thought it a paradise!

One of his most earnest inquiries was regarding the rotundity of the earth, and I expounded the astounding and new theory to him, that if he went on always in the same straight direction, he would at last, after years of walking and canoeing, come back from the opposite direction to the same spot whence he had started. He told me he thought that, upon reaching the horizon—which, however, if he tried, he must have found it difficult to attain—he would fall over a great precipice. I also told him that we had a method of transport by which we could go a distance, as from Canelos to the Topo in less than an hour, straight over the rivers and through the mountains. This information brought forth a sounding "cluck."

The seriousness and earnestness with which he listened to my explanations interested me much, and we became great friends. I delighted him exceedingly by giving him one of my pipes to smoke, and he, to make the best of it, completely swallowed all the smoke he could draw in huge volumes. The next day he told me he had been so giddy from its effects that he had felt very uncomfortable and could hardly stand, which did not surprise me much in one who had never before smoked strong tobacco and from a short pipe; nevertheless, he was nothing loth to have another fill, and

took care not to waste the good things that were laid before him, by again swallowing all the smoke, regardless of the discomfort he knew it would afterwards again cause him. I reminded him of this; but he merely said "he liked smoking the pipe." His thoughts never went forward to inevitable consequences, as ours in parallel cases so often disregard the unfailing Nemesis!

All these days a great many Indians had come to see me, bringing their families with them, and small offerings of plantains and yuca, in the hopes of my presenting them with needles, thread, or other articles; so that all the time I was kept in the house with my bad foot, I had plenty of company, and sometimes found my visitors too many and their visits too long to be agreeable. Amongst others, one day, two women came, each with a little child, one of whom seemed almost dead—utterly colourless, anæmic, and incapable of movement or uttering a cry; the other was certainly ill with some eruption, the nature of which I did not recognise. As I was not able to form any satisfactory diagnosis of the disease of the latter, beyond that it was also suffering from diarrhœa, I would not take upon myself to use any strong measures, but gave the mother a simple and harmless preparation to soothe the intestinal irritation. With regard to the former child, I told the mother that it seemed to me to be beyond hope, as it even then was practically all but dead. At this intelligence she cried bitterly, and begged me to

give her something for her child. Poor thing! she was ready to place faith in anything that she might catch at in the hope of saving her child, and thought, as I had given a remedy for the one, that I could also cure the other. Still, however sincerely I pitied her, and regretted my powerlessness to offer any aid or consolation, I was obliged to say I could do nothing, and that it was impossible that her child could live. Besides, it would not have done for me to give any remedy in such a hopeless case, as upon the child's inevitable death a short time afterwards, the danger of which they did not seem to expect, the Indians would doubtless have said that I had caused its death.

The child did in effect die the following morning, and was buried wrapped in a *llanchama*, a cloth formed of the thick inner bark or bast of a tree, and I had again to hear the mother's sad and doleful wailings, a kind of humdrum song intermingled with tears and sobs, in which she constantly repeated that her child was dead.

Among our peons was a woman, Jesus Losada by name, in admiration for whose pluck in undertaking so hard a journey from Santa Inez, I gave a very light load consisting of provisions of daily consumption, and which therefore, day after day, diminished, and by the time we had reached Canelos were finished, her original load thus existing no longer.

On the morning of our departure, when all our band were mustered, Miss Losada was found wanting, and our searches for her in every house and corner of the

village were fruitless. I therefore called the *curaca* (chief) of the Indians, and told him that as she had been lodging in his house, he was responsible to me for her and must find her. He declared his innocence of taking any part in her abduction, or hiding, which I did not doubt, as she was neither young nor beautiful, and he went away to institute inquiries and a search for her. They were fruitless, so he returned to me, but I told him I could not be satisfied with such a result, and must have some one to carry the load newly provided, and that if he could not restore the woman to me, I should be obliged to take him or another Indian in his place. This roused him, and with staff of office in hand, he entered every house and again sought her, I believe conscientiously, but to no avail; so I had to leave her behind and divide the load prepared for her among three of the men.

One of the peons also stayed behind, being only just convalescent from an attack of what they call "escorbuto," scurvy, a disease to which all new-comers are greatly exposed, almost unexceptionally, and the local cure of which is as original as it is painful. Although assured in Riobamba that we would be sure also to contract the illness, we fortunately escaped. It is doubtless brought on by the hard work and exposure, combined with the miserable food the peons partake of during the journey; and I have no doubt that had we attempted to live on their fare, we should have had something even worse than scurvy, though this un-

attended frequently results fatally. It would be a wise thing for travellers in the quite uncivilised portions of the great forest, where fresh provisions and even fruits are difficult to obtain, to carry a supply of lime juice. The cure I have alluded to is said to be efficacious, and it certainly had a good effect on one of our men. It consists of the application of gunpowder and hot capsicum per rectum.

As the invalid provided a substitute, we started forward again only one less in numbers, but minus the charm (?) of female society, and bid "adios" to our Indian friends with *shug rato gama* * to some of them who at the same time were setting out for Iquitos and the Huallaga, *viâ* the Pastassa, for salt and poison.

* A mixture of Quichua and Spanish in common use; equivalent to "Hasta luego," or the American "So long!"

CHAPTER IX.

FROM CANELOS TO THE NAPO.

THE road along which we proceeded, on leaving Canelos, bore evidence of some work having been performed in its construction, or, rather, in clearing a trail through the woods; and it was most pleasurable and relieving to be able to walk through the forest straight, head erect and chest expanded, without having constantly to pick one's way through the branches and undergrowth, as had hitherto for the most part been the case. Though so great an improvement on our previous paths, the road was by no means all that could be desired; for during the first few hours, almost every hundred yards we came upon large trees lying prostrate right across the clearing, and which had to be climbed over. In many cases the trees were so large that this was impracticable, and owing to the thickness of the trunks and the entanglement of broken branches, a detour had to be made scrambling through the heaviest growths of the forest. By evening we came to a portion of the track which the Indians had most recently been clearing

for the coming of the mission *padre;* and here we progressed favourably with heads erect.

At the first day's halt the camp was pitched between two little streams which have cut their way deep into the soil, and are called the "Tsatsapi Chiquito" and "Tsatsapi grande," about an hour's distance from each other.

The following morning I again heard the "*flautero*" performing his attractive song. All day the road lay in a northerly direction, along the tops of *cuchillas* and up and down hill. About half-an-hour's walk from the camping ground brought us to "Tsatsapi Grande," and two hours more of very fast going to the river Villano, a tributary of the Curarai, so that we had at length reached Napo waters, having as far as Canelos been journeying down the Pastassa valley.

The Villano was descended by walking in its bed and crossing it frequently by wading, till we came to several tambos, or small huts, situated along its banks and forming the "country residences" of some of the Canelos Indians. All these Indians have similar tambos, to which they can retire away from life in the village, and where probably game is more abundant and less hunted after. One of these huts we took possession of, the owners being absent, either in the village or in some still more retired part of the forest; and, as usual, all the Indians who were in the vicinity soon found us out and came to visit us, bringing presents of plantains, yuca, smoked fish, sloth, tapir, agouti, &c., most of

which, unfortunately, upon washing and inward inspection, were found to be full of maggots. We were therefore compelled to have recourse to our usual dishes: fowl, yuca, and sweet potatoes, with sago and eggs. The Indians themselves are not averse to cooked flesh which even passes the state designated by civilised communities as "high." We found here a new kind of potato, a long thick tuber of the finest texture and flavour ever bestowed upon a root. It is called "*mándi*," and is infinitely superior to the slimy potato of Canelos. Our men say that the *mándi* is also known on the Pintuc and at Baños, though we had not seen it at either of those places.

One of the Indians who visited us was the handsomest specimen of his race that we had so far seen anywhere; and one could hardly imagine his tall, massive structure, and frank, benevolent countenance to be surpassed in any country. I made him a present of a briarwood pipe, with which he was evidently very much pleased.

The next day commenced with an involuntary bath, with clothes on, as we had to cross the Villano at the start. Leaving the left bank of this river, we shortly came to a smaller torrent, the Chitata, which flows into it, and which was followed up a long way, partly in the water and partly over the stones and boulders, occasionally also cutting off the sharp curves in its course by passing through the bordering forest. Upon nearly reaching its source, high up, we left the Chitata and continued along the narrowest *cuchilla* we had so far

seen; in places not more than two feet broad on the blade, and one side in some places actually overhanging. The blade rose steadily and finally descended rapidly for a considerable distance, leading us down to one of the head-waters of the Curarai, here only a small torrent. In the bed of this we descended for about an hour, and came to another branch head-water, joining the first. The spot was a little open, and so beautiful that we pitched our tent on a sand-bank on the left side of the stream, the opposite bank, against which the water flowed, consisting of steep rock. From our tent only five steps were requisite to enter the cool, clear water for a bathe before dinner.

The head-waters of the Curarai consist of three small torrents which take their sources on the N.E. slope of the Llanganati mountains; and the origin of this river is on all maps, as compared with Canelos and other known spots on the Napo, evidently placed much too far west, for it cannot rise much farther west than a line drawn through Canelos and Aguano—perhaps a few miles, but certainly nothing like the distance usually figured in maps. After receiving the waters of the Villano, Nushinu, Supinu, Nuganu, and others unknown, the Curarai empties itself into the Napo, on the right bank, and as a tributary of which it ranks as second or third in size and importance.

We set out early again on a rainy day, but the weather afterwards cleared up, and a walk of about five hours down-stream, in the water, fording the channel

no less than thirty-three times, brought us to the Indian village of Curarai. It was very pleasant to rest again, the continual walking in the water over the stones for the last two days having proved a most trying ordeal, with the effect of making the feet exceedingly tender.

The little thatched huts forming the "church" and "convent" of the village are situated on a high clay bluff on the left bank of the river, and, as at Canelos, we took possession of the latter.

What most attracted our attention here was the immense numbers of butterflies which flitted and hovered about in the bed of the river and disported themselves on the sand, sucking the water from it and shaking their wings. In favourite damp spots on the sand they would form small gatherings of fifty to a hundred, densely packed together, so that we could frequently catch fifty or more in the net at a single blow: most were of the genera Papilio and Callidryas.

The peons we had brought from Baños returned from this place, taking our letters to be posted at Pelileo; so our party was now left to consist only of ourselves, the major domo and his son, and the two boys.

We sent for the head men of the Indians, and informed the two who came that we required regular supplies of provisions in the shape of fowls, eggs, yuca, plantains, &c. They made difficulties regarding the fowls and eggs, and said that these were being kept for the *padre*, who was shortly to arrive from the Napo; but we overruled their objections, and got a good supply

of varied provisions during the whole of our stay at this place; in fact, nowhere since leaving the Pacific coast had we fared so well. A list of the current prices paid for provisions will not be uninteresting:—

4 fishes, Bocachica, as large as good-sized mackerel	1 small fish-hook.
1 fowl	1 „ „
2 fowls	1 larger fish-hook, or 1 vara of lienzo.
1 large bunch of plantains ..	2 small balls of sewing-thread.
8 eggs	2 „ „ „
½ a peccari (wild hog)	2 varas lienzo.
1 tapir	6 „ „
1 ashanga (a basket like the Swiss "hotte") of yuca or sweet potatoes	2 balls thread.

The village of Curarai—if a few distantly scattered huts can be called a village—is inhabited by a mixture of Indians of mostly Záparo element; but the language spoken is almost as frequently Quíchua as Záparo. Two or three of the men also were of Jívaro origin. They all seemed to be a fairly orderly set—certainly much more so than the Canelos; and, like all Záparos, they are quieter; not so fond of display in their dress and ornamentation, and drink less chicha than any of the other neighbouring tribes—Jívaros, Canelos, or Napos.

On Sunday the Indians came to the priestless church to pray and sing a service of which they did not understand a single word. One of them brought his trousers (though few possess such luxuries of apparel) rolled up under his arm, so that they might not get wet and soiled on the road; and he then, before going into the

sacred edifice, seriously put on the "breeks" in the porch. The church was a structure similar to that of all these mission villages, namely, a large palm-leaf roof projecting some distance beyond the end wall to cover the entrance, with sides of split bamboo.

The Indian "Curaca," or "Gobernador," arrived two days after us from Aguano, and we took an early opportunity of conferring with him as to a supply of men to carry our baggage on to the Napo. He presented me with a piece of smoked tapir, which proved excellent eating; but the conversation opened by his accusing us of probably having brought the small-pox and such-like delights of civilisation with us, which disease we had heard was raging in the towns of the interior. We assured him we had brought neither evil intent nor sickness with us, and that we had, moreover, abstained from passing through Quito. Even our "*lienzo*" came from the coast, where there was no small-pox; and we mentioned that we had not brought any from the interior, although it is cheaper there, and the Indians prefer it: this he saw was a fact, and it considerably reassured him. He then made difficulties about giving us men, and said we would have to pay five or six *varas* of *lienzo* for each one to Aguano. Knowing, however, that two *varas* only was the usual price, we refused to accede to this demand. Finally, to facilitate matters, and to promote harmony, we agreed to pay three *varas* for the ordinary loads, and four to those men who should carry the very heavy ones. He vacil-

lated at first, but we clinched the bargain by telling him that if he did not furnish us with men to carry our baggage at reasonable rates, we should leave it there, and then inform the *padre* at Aguano, who would oblige him to transport it for us without payment at all.

The matter was therefore settled, the *padre's* name having evidently great influence, and some of the men came to receive their payment in advance, each man three or four *varas* of *lienzo*, according to his load. There were, however, not enough men the first day, so the *curaca* gave the two under officials sufficient *lienzo* to pay the number wanting, and showed great energy and decision, now that he had made up his mind, in obliging them to accept it, and to seek and compel the requisite carriers to come in. In all, twenty-three Indians were got together, two of whom were boys, who carried light loads. Two of the men had their wives accompanying them, so that in all, when the time for our departure arrived, we formed an exodus of thirty-one persons, leaving the village almost deserted. The only men we saw who remained behind were the *curaca* and one old man; but of course there may have been more who did not appear.

The first day's march was a very short one (little over three hours); up and down steep hills, and always through the interminable dense forest. It brought us to the little river Jandia (Jandia-yacu), where we encamped. The Indians proved to be not nearly such

untiring carriers as our professionals from Pelileo. They were fond of halting at almost every little stream to rest, bathe, and drink chicha; but this we did not mind, as it gave us time for butterfly collecting. What was objectionable, however, was that the Indians did not like stopping so early in the afternoon as we did, but always wanted to march on till dark in their dawdling manner, a procedure which did not suit us at all, as we preferred to walk hard for a portion of the day, and then to encamp early, so as to have time to settle down comfortably and prepare our meal before dark. Fortunately, however, we got on fairly harmoniously, and without, at least, open discontent on the part of the Indians.

Evidently neither these people nor the Canelos had seen lucifer matches before, for the traders always carry a flint and steel. Our wax matches caused some sensation at all the villages, and the promptitude with which a flame was produced was doubtless attributed in the Indians' minds much more to our personal dexterity than to any properties inherent to the match itself. Whilst at Canelos I happened, when surrounded by a number of men and women, to strike a match on my leg for want of something drier. Great sensation among the spectators was the result, and they were persuaded that I must have struck fire out of my leg. At Curarai also I chanced to strike a match in the same manner, and frightened one of the women very much thereby; indeed, she would never

come anywhere near me after so potent a display of magic.

From Jandia-yacu we continued the march up a long ascent, and then along the blades of narrow *cuchillas*, until a declivity led us down to the Nushinu, a lovely river falling into the Curarai on its left bank. From the point on this river to which we descended a cut through the woods brought us to a beautiful broad sandbank farther down its course, where we stayed for the night.

This was a most attractive spot. Behind us was the thick forest, lined outside its border with dead trees and driftwood on the shining sand; before us the clean bank and the limpid stream flowing past towards our right, as we faced it, where it came to a more rocky and shallower bed, and rushed down sparkling over the stones against a hard bank covered with mosses and ferns, which gently guided its course round to the left and out of our sight. On the steep bank opposite us was again the primeval forest, adorned with graceful palms and bamboo, and on our left the glittering river coming towards us. The butterflies on the sands were so numerous and fearless that we quietly knelt down and took them with our fingers. When dressing by the tent after a bath in the river, one of the most brilliant *Catagrammas* came and settled on my lips, as if to kiss me, but fell immediately afterwards a prey to my net. He proved to be the only one of his species that I caught.

My companion shot, as it flew past, an ordinary kind of crow (*shirą*), which fell into the wood behind us; and the Indians, before the dead bird had reached the ground, all dashed into the thicket after it, quite irrespective of thorns or snakes, which might so easily have assailed their naked bodies. The foremost man immediately spotted the bird, and picking it up long before the dogs could find it, cut it into little pieces, and each one had half-cooked and eaten his share within the space of two or three minutes from the time the shot was fired, amidst great merriment. They much admired the shooting of birds on the wing, as with the blowgun they can only hit them when they are settled on a tree. The blowgun, however, has the immense advantage of silence; and an Indian will creep under a tree and shoot every bird in it one after another, marking each one down as he lazily flies away when struck by the sharp dart, and picking them all up unerringly afterwards from the thick undergrowth.

From the Nushinu another considerable ascent had to be scaled, and after reaching its highest point a long declivity brought us to the foot of Sotano, the last mountain to be crossed before coming to the Napo.

The descent from the Sotano is along a very narrow *cuchilla*, and on one of the highest portions of its blade a large landslip had taken place on the steeper side, already almost perpendicular before. Now it was overhanging, and not more than two feet broad at the

top. The view down the precipice from such a frail summit on to the devastation of broken trees and earth all shattered below, was imposing in the highest degree.

At the N.E. base of the mountain we continued walking for about an hour down the pretty little stream Huascayacu, and then through level woods to the Cosano river, where we stayed a night, soaked through and through by the heavy rain that had been falling and continued till next morning.

As had so often been the case, the day's work was commenced by crossing the river on whose banks we had passed the night, so that from the outset we started thoroughly saturated by fording the deep water caused by the heavy rains.

Two hours' sharp walking brought us to the Arajuno, which flows into the Napo just below Aguano. The stream was too deep and broad to cross, the water for some distance being up to a man's shoulders, so two Indians swam across to fetch a canoe from Aguano for us; and whilst we were awaiting their return four of the others decamped. This, however, was now of little consequence, as a canoe was at hand. In it we crossed the river and transferred the baggage immediately afterwards. We now proceeded in the water on foot, pushing the canoe through an *estero*, or creek, which breaks through from the Napo into the Arajuno when the former is swollen—rather an unfrequent occurrence to find the waters of a main river flowing into its

tributary *—and this brought us out on the Napo, exactly opposite Aguano, thus completing the road from Baños through the forest in eighteen days' actual walking, or forty-five days' foot journey, including necessary stoppages.

* The waters of Parana enter the Uruguay not far from the disembouchure of the latter, the inferior stream; but this hardly bears comparison with the Arajuno and Napo, as the former are two rivers flowing into one broad estuary.

CHAPTER X.

THE VILLAGE OF AGUANO.

WHAT a glorious sight refreshed our senses on reaching the Napo's banks, tired of the sombre forest! The noble river, even when not swollen, is broader than the Thames at London Bridge, although it takes three weeks down-stream to reach its mouth in the Marañon; and the distance from Aguano to the sea is about 3,000 miles! This reflection gave us the first true impression of the immensity of the Amazonian river system, especially when we considered that the Napo is by no means one of its largest tributaries. And I may here say that the imposing grandeur of large rivers is, I believe, never produced by the simple sight of them; for the larger they are, the more they resemble a sea, and the less true an idea do they convey to the eye of a powerful stream. This may be said especially of the Amazon itself. It is not the sight of the visible portion, but the recognition of the extent of the infinitely greater invisible portion, and the vastness and scope of its functions, which enable the mind to realise and marvel

at the origin, course and destiny of the wondrous waters that do not sway to and fro or rest in tranquil repose like the sea, but flow onwards ever.

The whole scene looked so grand and open that we drew a deep breath of relief to find ourselves again under the clear heavens and free from the oppressiveness of the dark, damp woods. The little village of Aguano lay right before us, on the left bank of the river, situated on a high red bluff. We crossed in canoes, and found, to our great disappointment, that all the Indians were just taking their departure; fleeing from the small-pox which had made its appearance at the village of Napo above. The "Gobernador," or "Curaca," a fine old Indian, came with others to see us; and when I told him we intended going up the river to Napo and Archidona, he was very much alarmed that we might bring back small-pox with us, from which most of the Indians were already escaping; and he tried all his powers of persuasion against our undertaking the journey. Firstly he said that all the Indians at Napo were dying of fever: this I made him understand would not deter us. Then he said that small-pox was making havoc among the people there, and that we would bring it with us on our return, to which I still answered that we must go. He then maintained that the river was most dangerous, our canoe would be overturned and we should be drowned. I replied that all this did not frighten us, and we should go nevertheless. At this he said we should not go; and he proved to be right,

for the next day there was not a single Indian or available canoe left in the village, and all day canoes were passing in mid-stream from above laden to the water's edge with families in flight. Here we were, therefore, left upon our own resources.

We bought a canoe from a New Granadian, named Llore; but without men we could not possibly stem the current for a journey up-river; and we further fortunately procured from an Indian, the first day before he had fled, a few miserable-looking chickens, and a small plantation of yuca. Thus we became regularly established at Aguano for an indefinite time, until Indians and more canoes could be again procured to undertake the journey to the Marañon. The only remaining inhabitants in the village were a couple of traders and their wives, with the mother-in-law of one of them (a Záparo woman), and two little Záparo children.

We took up our abode in the "convent," as the *padre* was absent on a journey to Archidona, the head mission station. The so-called "*convento*" occupied the highest point of the village and stood about twenty yards from the river's edge, which at this point consisted of a vertical bank of some thirty to forty feet in height, at low water, and composed of successive strata of humus, red earthy clay, shingle, lignite and decayed wood, and fine white clay. From this high bank, and from our habitation, the view was very beautiful. Before us flowed the majestic river, rushing down from the right through three distinct channels parted by two

verdant islets, the streams from which united their power and direction against the west side of a rocky hill just above the village, whence they were thrown back in spinning eddies into a single broad channel in front of us, their main strength resolutely continuing to press and grind against our bank, which down-stream sloped from a steep bluff into a gentle sandy shore. Following this a little way, the stream was cut off by a broad bank of coarse shingle and large water-worn stones, which stretched half-way over the river to an island in its centre, conquering the pressing waters, with only a small overflow, and rolling them off to the right bank, where they immediately afterwards again parted to spread through various cross channels back to the left bank; the remaining branch on the right taking up the addition of the Arajuno's waters on its way.

On very clear mornings and evenings, beyond the first black line of vegetation forming our usual western horizon rose another straight, dark-green terrace; above this another higher line, grey with the distance; and topping all these well-defined giant steps, a long array of streaked white, on which stood in proud eminence the immaculate peaks of Cotopaxi, Antisana and Saraúrcu high in the heavens.

How sublimely suggestive were the shades of this ladder to the skies; at each step higher and nearer heavenward all becoming lighter and fairer, until at last against the golden clouds, enveloped in the dazzling atmosphere of the setting sun, these emblems

of majesty and never-changing spotless purity were reached!

Our time at Agnano was now chiefly occupied in household duties—as we always had to undertake our own cooking—collecting lepidoptera and making voyages of discovery by land and water in search of provisions, chiefly from the hidden plantain and *yuca* plantations of the Indians. Two entire days of each week were spent by me, with two of the boys, getting in this provender, which formed our staple food for over two months. Meat we seldom ate, as birds were scarce, and other game, without good dogs, almost impossible to get at, so we had to content ourselves with the same simple fare morning and evening—namely, boiled *yuca* and plantains—and, as long as our Liebig's extract lasted, an accompaniment of soup. We fortunately always ate with good appetite, and thoroughly enjoyed our meals, owing, no doubt, to the constant hard exercise which was daily undergone. We fully realised that "*l'appétit fait la meillcure sauce,*" and that "*il vaut mieux découvrir un nouveau plat qu'un nouveau planète.*" Although we had since about three months slept in the open air, and been wet through almost all and every day, we had enjoyed the most thorough good health. Moreover, there was an occasional treat.

One day a q[illegible] of sugar-cane, which grew hard by, was crushed a[illegible] juice boiled down to molasses. Another day we [illegible]me "*barbasco,*" which procured us a supply o[illegible] fish. The *barbasco* is a

poisonous root which is macerated with a stone, placed in a wicker basket, and this is then stirred bodily in the water. The small stream to which we applied it was first dammed *above*, as the fish very sensibly always try to escape from any pollution of their waters up-stream; and after a short time they are found stupefied floating on the surface of the water. I was informed that *barbasco* has occasionally played the *rôle* of a suicidal poison amongst unhappy women in these parts. Amongst the varied and delicious small fry we collected was a fair-sized skate, which I was rather surprised to find so high up in a little sandy brook in the woods, though this fish abounds in the main river, where it is much feared on account of the bad nature of the wound it inflicts, and the terrible pain it causes. An Indian never walks in the water in sandy places without "progging" the bottom before him with a stick or spear to frighten away the skate. Skate are however only one of the many plagues.

The worst of them is not mentioned among the plagues of Egypt, and is frequently ignored and denied by many travellers, namely, the plague of vampire bats. At Aguano after dark they reign supreme; and if the tip of the nose, the toes, or the fingers are uncovered during sleep they are sure to fall a prey to these night hoverers, who extract a considerable quantity of blood. The first night of our arrival, Mariano, the two youths, and the little boy all had their toes bitten. One of the dogs also suffered severely, and lost so much blood by

their continued attacks that he became quite useless, and only began to recover strength when the plan was devised of putting him regularly to sleep at night under an inverted large earthen pot. Two of our fowls were killed by the bites on the hock, where they are always attacked, unless put into a completely closed box for the night. For this purpose the Indians use the centre portion of an old canoe, placed bottom upwards; and at sundown the fowls always most willingly enter it and allow the end to be closed upon them. The depredations of these bloodthirsty imps fall heaviest upon children, whose blood they seem to have a special liking for, and by whose restless motions during the night, owing to the heat, the covering from feet and hands is very apt to be removed, whilst the head is also put outside the mosquito net. I have seen a little Záparo child at Aguano perfectly pale, anæmic and debilitated by constant loss of blood from the head and feet; and was told by two trustworthy persons of more than one case of children entirely succumbing to the attacks of vampires. The curious feature in the bat's bite is that it is hardly ever felt, even when the person attacked is awake. I myself had a remarkable illustration of this, and stood with a man who was remarking that he could not understand how some people always got so unaccountably bitten, though whilst he was actually making this remark, in the dusk, a bat was sucking one of his toes, as was evidenced by the bat being seen by me and himself to flutter away

whilst the man's toe, to his great surprise, was found to be bleeding severely.

The bat is said to settle by his victim and flutter his wings gently whilst sucking the blood, thus fanning the wound he inflicts, so that it is not felt. This I cannot vouch for by personal observation; but certain it is that the bat does not settle on his prey, but alongside it, on the pillow or ground; for invariably those who sleep on their side are bitten on the nose, and those who lie on their back on the ears. In a like manner fowls are only attacked on the protruding hock when sitting on the ground or any flat surface.

By the foregoing it will be seen that the depredations of the vampire are not a mere "myth of imaginative travellers," as Professor Orton in the 'Andes and the Amazons' describes them; notwithstanding, moreover, that Darwin, to whom the book is dedicated, saw incontrovertible proof of the blood-sucking propensities of bats in Chili. I myself, with most others, was inclined to disbelieve the rapacity of bats for blood, until my stay at Aguano, although on the Guayaquil river, where I spent a number of years, cattle are said to frequently suffer from it.

One day we went down to Balsa Chicta, an arm of the river a little way below the village, and there amused ourselves at gold-washing in the Indian fashion in order to satisfy ourselves regarding the presence of the precious metal in the bed of the river. Although we soon got tired of the work, being by no means a

particularly entertaining one, the result was satisfactory, and proved beyond a doubt the rich auriferous quality of the shingle composing the river's bed and banks. The Indian method of washing gold is very simple. A wooden tray, the hollow of which converges gradually to a depth at its centre, is filled with gravel and sand at the water's edge. A rotary shaking motion is then given to the tray whilst holding it in, and occasionally a little under, the water: thus the coarser gravel is brought to the top, and the heavy black sand containing the gold grains is gradually worked to the convergent hollow at the bottom. The rough upper portion is carefully removed, and the magnetic sand, in which the gold dust is clearly visible, roasted and separated from the precious metal by fanning.

On one occasion I had a narrow escape from being bitten by a Mygale, or tarantula spider. I had seen her at the mouth of her den in one of the posts of our dwelling; and in the morning, upon trying to catch her, she only withdrew farther into her parlour, out of my reach. In the afternoon I came in and took up a pair of *alparagates* (fibre shoes), which had been lying on the ground at the foot of the post; and whilst engaged in conversation held them some time inattentively in my hand. After a short time, in order to take up something else, I threw the shoes down, when out of one of them stalked my acquaintance of the morning, no doubt aroused from a comfortable siesta in my shoe. The spider was immediately secured, and I tried to ex-

periment her bite upon a dog; but she would not show fight, and was therefore bottled with some cyanide of potassium. She was full of eggs, and would have raised a fine brood if left at large.

Sticking out of the river bank in front of our abode we found some large pieces of rude pottery, and one almost complete jar of burnt clay, between three and a half and four feet high, at a depth of five or six feet from the surface. Upon enquiring about them, Mr. Llore informed us that he had also, a year previously, found one or two of them whole, the river having washed away a portion of the hillside. The jars he found contained human remains, and one of the oldest Indians told him that before their tribe came to that spot, another tribe of warlike Indians, now extinct, had lived there, who buried their dead in these large jars, placing the trunk of the corpse in first, and filling out the spaces around it with the limbs, which were previously severed from the body. The probable correctness of this account was further attested by the manner in which some of the bones were disposed in the earthen vessels.

On the 3rd September, as Padre L. Pozzi arrived from Napo, we had to vacate the convent, and took up our abode in one of the deserted Indian huts. The Indians had all fled from Napo, and the *padre* went with the two traders to Santa Rosa to see if any had remained there; but returned, having found the village completely abandoned. However, on their way back, they met with two Tena Indians and two little boys, whom they

brought with them; but during the night these all decamped, so we lost our means of finding out the retreats of any others, as we had hoped to do through them.

Some days after, three Záparos chanced to come to our village, so we sent Mariano with them and Baca to search again. After two days they returned, having had a fruitless journey; but our hopes were again revived by one of the Záparos promising to go and fetch some more of his tribe from the Supinu, a tributary of the Curarai.

We were getting heartily tired of Aguano, and most anxious to find means of prosecuting our journey down the river.

CHAPTER XI.

STILL AT AGUANO.

DURING the night of the 9th September we were awakened by a fearful rushing sound from the river, and we at once roused ourselves and went out into the open to haul the canoes further out of reach of the growing waters. It proved fortunate that we did so without delay, for by morning the river had risen about twelve feet, and the rush of the waters had become a sight to behold. Notwithstanding the immense breadth of bed, and that in many places large tracts of lowland absorbed much of the strength of the flood, the water flowed past us by mid-day at fifteen feet above its normal level, carrying down innumerable large trees and enormous masses of the vegetation which happened to resist its furious charge as it sped onwards with a roar. No canoe or boat could have crossed the river or have lived upon its foaming billows and whirlpools; and ever and anon huge trunks of trees, with all their roots attached, might be seen twisted and thrown upwards half into the air, and rolled over and

sunk again, as though their weight were that of quarter-staffs.

Of the hillside bank, where the "convent" stood, some fifteen feet were washed away; of the two islets above, one disappeared entirely. In place of the sand-bank opposite the village, one twice its size of shingle was formed. The gentle sandy slope along the lower portion of the village was changed into a steep stony bank further in, and under which now a deep channel coursed. The large island on which our yuca plantation stood was half carried away, and the numerous channels in front of the mouth of the Arajuno entirely altered, both in direction and set of the water. Two days after all was quiet again, and the turbid waters clear at their usual level, but with the features of the river bed entirely metamorphosed. It is not the rise of water—for this is much more considerable lower down on the Amazon itself at times—but its sudden rapid and headlong rush on the rivers near the Cordillera that imparts to the floods such destructive power.

Since the *padre's* arrival at Aguano we passed our time a little more pleasantly than before. He joined our mess; and the addition thus obtained of an occasional small fowl from the stock he brought up from Santa Rosa—half the bird for breakfast, and half for dinner—though not too much to set before three hungry men, improved our fare considerably, and gave flavour to the soup. We always dined at five o'clock,

and after dinner sat out on the river bank, when it did not rain, smoking and watching the setting sun. After dark we all returned to the hut, where we regaled ourselves in the most varied conversations, we supplying the more recent data of general events in Europe and the civilised world (our news not being more than two or three months old), and the *padre* interesting us by the narration of his own hard experiences amongst the Napo and Canelos Indians and the Jívaros. Among the last-named he had laboured, under many difficulties and with poor reward and meagre results, for three years. Music was a favourite theme of conversation, both my companion and the *padre* being accomplished musicians. We thus agreeably whiled away the evenings, generally till past eleven o'clock—late enough hours for the woods and early risers—and then retired to rest to be lulled to sleep by the clatter of the frogs, insects and night-birds in the adjoining forest. Among the performers of our nightly lullaby was a sad-toned and mournfully distinct minor-scaled goat-sucker. There was also a loud mellow clucking, said to proceed from a species of opossum, but which, it has since struck me, is just as likely to have been emitted from the throat of some large lizard. I could never succeed in getting a glimpse of the animal.

As the return of our Záparo friend with some of his tribe, to take us down the river, was purely problematical, we always continued a sharp look out for passing natives, and were agreeably surprised at length

by the advent of a Napo Indian with his wife and little child, though she, poor woman, was ill with fever. Small-pox had broken out amongst his fleeing comrades, and he was returning to his village, seeing that flight could not save him from infection. He for one agreed to accompany us down to the Marañon as soon as his wife got better.

Disappointment was our doom, though, at least in our supposed acquisition of even this hand towards the staff necessary for the prosecution of our journey; for the next day the fever of the wife and child turned out to be the mere premonitory symptoms of small-pox! To give an idea of the consternation this discovery caused among the scant population of our village, *i.e.* the two traders and their wives, but, above all, Llore's Záparo mother-in-law, would be difficult, and would require an abler pen than I possess. The *padre* and we were by no means pleasurably impressed by the circumstance; but we were not unreasonably alarmed. The others thought of nothing but instant flight, as if their houses were on fire and they were in risk of being immediately consumed in the flames. In Llore's hut clothes were being bundled pell-mell into a bag, and any available provision thrown out into the little canoe moored alongside; the Zápara, all dishevelled, as though beside herself with terror, rushing about and collecting her chattels and those of her daughter, who was too frightened even to say or to do anything. The only accessible one, Llore himself, whose pale seriousness and determination also

to leave the hateful spot with his family only too plainly indicated his share in the alarm, we at length persuaded to listen to our line of argument, devised not only for ours but also for his own benefit. The only place our panic-stricken friends could go to, and so intended, was to the Záparos, their relatives, and in this course we foresaw the greatest danger to them. Some of them had been already in actual contact with the infected woman, and might therefore easily carry the infection with them. If thus by their means the disease were transferred to the Supinu Záparos, these would to a certainty either kill them outright, or would at least ruthlessly abandon them to their fate in a far more helpless position than they were at present with us near them. The correctness of this view of the case, which he had overlooked, made Llore at once see the double danger into which they might run; and fortunately the Zápara, who knew her own people only too well, also at once realised the noose into which they might place their necks; the more especially as we convinced her that the infection might already be upon them or any of us, and that therefore the best means of combating it would be to stick together for mutual help, since nothing could be gained, nor the pestilence avoided, by flight. This indeed had been sufficiently clearly illustrated in the Indians who had just arrived and brought the small-pox among us.

Such excessive consternation at the appearance of a disease like small-pox, although so loathsome and terrible

a one, may perhaps appear exaggerated and ridiculous. But if it be remembered that to an Indian small-pox is certain death—the most dreaded enemy, who has over and over again swept off entire tribes, and the name or passing suspicion of which from youth up has always been trembled at and fled from as from death itself—we shall not be surprised at its effect when appearing so suddenly in the very midst of an already nervously alarmed community. Many Indians abandon a member even of their own immediate family to die alone when overtaken by this terrible scourge.

The futility of flight being admitted by all, it now became all-important to conceal the outbreak of small-pox from any Indians or Záparos who might chance to come to us; since naturally, if they got the slightest suspicion of its actual existence in our immediate neighbourhood, we should not only lose them at once, but the news would also be communicated to others, and we should become confirmed outcasts whose residence none would approach for months to come. The patients were therefore transferred to the remotest hut in the village, and Quinteros—by which name the husband was known—strictly injunctioned not to allow himself to be seen on any account should any other Indians arrive, and most particularly to keep clear of the Záparos if they came.

Shortly after this, on the same evening, just as we were adjourning at dusk from our usual seat and outlook over the river, several canoes appeared in the distance crossing

the farther channel above the village, and after a few moments we could just discern the Indians they contained landing on the bank of the upper island in mid-river. We at once set out in our two canoes and met them on their landing-place, which they had no doubt chosen to reconnoitre the village from at night. Some of the men we compelled to accompany us to the *padre*, who censured them for having abandoned their village and him, and informed them that the next day three of them should accompany him to Santa Rosa and Loreto, where he feared one of his brother missionaries might also be abandoned and in want, without any company whatever. Another Indian was sent off to find the "*curaca*" and bring him to us, as he alone would be able to exercise sufficient authority to ensure the collection of more men; so the next morning the *padre's* seat at our table was to our great regret left vacant.

At the end of five days' patient waiting we were much pleased to welcome him back, as during the interval the time had passed much duller than usual without his pleasant company. Two of the three Indians were now sent again in search of the *curaca*, the previous emissary not having returned; but to ensure their reappearance on this occasion, one young man, a son-in-law of the *curaca*, was retained as hostage and chained to a post in our hut, as we were determined not to be left in the lurch again.

For nearly three weeks we had thunderstorms almost

every night; most of them the longest and most violent I have ever witnessed. The suddenness with which they broke on two occasions was truly awful. Without the slightest premonitory warning or fall of rain, on two quiet, peaceful evenings, soon after sundown, the most terrific roll of sharp claps of thunder, simultaneous with blinding lightning, burst upon us, as if in our very ears, like a hundred huge cannon discharged in our midst, shaking the ground and the hut. So sudden were these discharges of heavenly artillery that every one present started involuntarily, the Roman Catholics as unconsciously at the same time devoutly crossing themselves with an involutary exclamation of "*Misericordia!*" or "*Ave Maria purissima!*"

Several times storms which commenced in the evening continued, with constantly recurring thunder and lightning, till dawn of day.

These heavy downpours of rain were rather prejudicial to our comfort, the roof of our dwelling being minus the thatch along its peak, so that the water penetrated and formed small pools along the centre of the floor. Altogether, though large enough, our habitation—an abandoned Indian hut—cannot be said to have been very commodious, nor to have contained many of the luxuries and comforts generally found in one's home.

The hut consisted of six posts of palm-stems, which supported the large palm-leaf roof, bound upon light bamboo rafters; the walls, about six feet high at the

eaves, were of split bamboo placed carelessly together so as to admit light and air, and ran round the whole fabric at the same height, leaving an open space at each end for doors. Above this wall, the two ends were open up to the angles of the gables, so that in regard to ventilation nothing could be desired. All joints were bound with *lianas*, not a nail existing in the whole structure.

One half of the interior, partially divided from the remainder by rough split bamboos, formed our dining, smoking, sitting and bed-room. Its furniture consisted of an earthen floor for a carpet, with muddy pools in its centre, and elevations and depressions along the sides caused by the numerous sepulchres of departed tenants. Two cases of baggage on one side were used as a table, with three more for chairs; a hammock slung across a corner passed for a sofa; while on the other side, situated on the highest and driest mounds of the "sleeping," stood our camp-beds. The other half of the mansion was the kitchen, where the most modern epicurean apparatus was contrived for the exercise of culinary talent, namely, three stones to support the pot over a wood fire, kindled upon the ground. The roof over this portion of the establishment was very leaky, with the advantage of letting out the smoke more freely; and after heavy rains, portions of it had to be crossed on stepping-stones, to avoid placing one's feet in the water. However, as we always passed the whole day out of doors wet through and covered with mud, the want of dryness in

the house did not form the disagreeable contrast it otherwise might have done. Before dinner we always took a refreshing bath in the cold river, and put on dry clothes (shirt and breeches) for the evening.

Some Indians, one day subsequently, came on foot along the bank from down-stream, where they had left their canoe, and told us that their wives and children had nearly all taken small-pox, and they themselves also plainly showed its first eruption on their skin. We immediately sent them back to the island in mid-river, where they had settled, Quinteros and his wife accompanying them by his own desire, as they belonged to his village (Napo), with strict instructions not to allow themselves to be seen by any Záparos who might pass towards our habitation. At the same time we instructed them as to the treatment they were to observe for their cure, and gave them some simple remedies, promising to visit them shortly, which I did with Padre Pozzi on the two following days. We descended the river in our canoe to the spot they had described, and there found thirteen men, women and children, all huddled together in a miserable grass hut that could barely hold them, packed closely together on the ground, like sardines. All were very bad with small-pox, and only two men could get about at all to assist the others. One of these two had the disease, though, so far in his case, it had not reached the worst stage. The others were nearly all most pitiable objects, loathsome and offensive as only those can tell who have

seen confluent small-pox in its worst forms, covering entirely the body, head and limbs. Poor creatures! to find themselves in this terrible plight, no wonder they flee from the scourge as from death itself; for such it is to them, and in one of its most abhorrent forms.

I had often from previous knowledge of, and personal friendship with Jesuits, admired the self-sacrifice of their lives; but never was this so markedly realised as now, when I saw the *padre* busying himself among these miserable sufferers, attending to their physical requirements, administering remedies, cheering and giving them advice, whilst listening, with his face close to theirs—now distorted by the repellent disease—to their inquiries and confessions, and trying to satisfy their moral cravings by pointing out to them the road to that eternal salvation in which he had laboured to lead them to believe. Let this example show that nobody should lightly condemn any religion, or religious sect; for in all of them may be found similar true charity, which from its silent nature can but seldom come to the knowledge of the world. How can one not respect and admire the conduct of men who, like this, leave all the pursuits they have been brought up to and have taste for, art, music, intellectual intercourse with their fellows, and the comforts of a well-to-do home, not for a whim of temporary duration, or for search of excitement and adventure; but to live permanently in a pestiferous climate, ill-fed, away from all that is congenial to their

tastes, almost always without a single companion or friend; where, even if they had it, money could procure them nothing; in dangers of many descriptions; and all to pursue the thankless task of teaching the dull, unfeeling, and ungrateful Indian. Can the lives of our Protestant missionaries be compared to those of Rome in abnegation? Those who have known both, be it in the East or in the West, will be able to say which lead the lives exemplified by their professed Master.

A task equally thankless as that of teaching the Indians, is the curing of their ailments. Notwithstanding all one's counsels and injunctions, when, for instance, in a burning fever, they will cool themselves by plunging into the cold river. When any remedy is given them, with the strictest prohibitions against taking anything else, they will, immediately one's back is turned, inundate an administered dose of quinine with a draught of a pint or two of tobacco water (*i.e.* tobacco leaves crushed and kneaded in water), their sovereign remedy for all ills. The effects of the copious imbibition of this doubtful panacea are generally far from encouraging to the healer.

The Napos, like the other Indians of the Provincia del Oriente, have many peculiarities and interesting traits in their character. They are quiet and cowardly, excepting when drunk; and upon one such occasion, a few years back, were on the point of killing one of the *padres*, who, however, eventually escaped in a most providen-

tial manner, his clothes torn from his back. As a rule, now, they hold the *padres* in the greatest respect (all civil authority being vested in the Jesuit Mission in the Orient), and especially the *padre* with us, as a man with whom they well know they cannot trifle. Upon one occasion, after an absence from the village of Aguano, this energetic missionary returned to find that some of his orders had not been carried out; so he called the "*curaca*" before him and rated him severely. This sturdy old Indian advanced the excuse that his lieutenants had not been willing to carry out his orders, and that he could get nothing done by them. Such justification of his conduct, however, did not hold good. The *padre* quietly informed him that the "governor" must, if his commands are otherwise disregarded, make himself obeyed by force, or his investiture with authority would become meaningless; and further, that the governor being responsible for the execution of the *padre's* orders, the punishment for their non-fulfilment must fall upon him, and he must therefore bare his back and receive castigation before the whole community. A few light lashes were administered; and they certainly had the desired effect, for when the cane or whip was thrown to the shamed *curaca* with the exhortation that as long as he adorned that post he should not brook disobedience from subordinates, he, smarting probably less from the material lash than from the degradation his culpable leniency had brought upon him, snatched it up and pitched roundly into his colleagues

with such a hearty good-will that his orders have since then not been disregarded nor his sway disputed. The *padre* remarked to me, "we must make men of them first and Christians afterwards," which seemed to me a good practical maxim.

CHAPTER XII.

THE UPPER NAPO INDIANS.

THE Indians in the "Oriental Province" of Ecuador are, as already mentioned in a previous chapter, divided into two great classes called "Indians" and "infidels" (Infieles, Aucas). The former all speak Quíchua, eat salt, and are semi-Christianised; whereas the latter speak the many languages of their various tribes, do not eat salt —at least do not take measures for supplying themselves with it regularly—and are not baptised. Amongst these are the Záparos, Piojés or Santa Marias, Cotos, Tutapishcos, Auhishiris, Intillamas, Meguanas, Copalurcus, Tamburyacus, Payaguas, Cauranus, Pucabarrancas, Lagarto-cochas and Tagsha-Curarais. Most of these, however, indeed all except the first five enumerated, are in fact very little known, having been met with but on rare occasions by traders and travellers; and it is more than probable that many of the above names refer actually to the same tribes and are really only designations of locality. This is especially the case with those who occupy territories in close proximity to one another;

for there seems no reason to believe that so many quite different tribes should exist within such limited boundaries as their names would imply. However, I give the names as they are currently adopted by the Indians, Záparos, and traders on the Napo itself.

It is probable that the Cotos and Tutapishcos are merely parts of one tribe, as are also the various distinct hordes of Orejones (big-eared) of the Putumayo; while the Auhishiris, Intillamas, Meguanas, Payaguas, Cauranos, Pucabarrancas, Tagsha-Curarais and Lagartocochas are likely to be intimately connected with the better-known tribe called "Iquitos." The Piojé or Santa Marias—also called by one or two travellers Encabellados and Tarapotos—I have little hesitation, from their language and habits, in pronouncing as belonging to the same tribe as the Piojés of the Putumayo and Macaguájes of the Cocaya.

Much remains to be learnt about all these tribes, and they present a most interesting field for investigation. All we know of them at present is that almost all the latter ones enumerated, on the Napo, are dangerous and barbarous, many with whom they have come into contact having failed to get away with their lives, as the names of several places on the river testify. The designations of such spots have originated from onslaughts and massacres—mostly of the Auhishiris—perpetrated upon passing travellers and neighbouring peaceful tribes. The present generation has probably to thank the early Portuguese raiders for these hostilities.

In descending the river, I shall give the scant information gathered regarding these unknown peoples, as each of their localities is passed, and leaving the "Infidels," I shall now return to the "Indians."

To avoid confusion, it must be borne in mind that whilst in the Provincia del Oriente, I shall—to use its technicality—when speaking of the non-salt-eating, uncatechised tribes, call them *Infieles* or *Aucas;* and when "*Indians*" are mentioned, the name must be taken to refer only to the Quíchua-speaking, semi-Christianised peoples who formed that portion of the once great Inca nation annexed by the marriage of Huayna-capac with the Shyri princess, Pacha.

The "Indians" of the Oriente occupy, besides Canelos, Sarayacu on the Bobonaza, and the Upper Curarai village (which settlements can hardly be classed with the *bonâ fide* Napo Indians, as they contain considerable infidel element), the entire Ecuadorian territory from the higher eastern slope of the Andes, on the left bank of the Napo, down to the Coca. Their only settlements on the right bank are the small villages of Coca, a little below the mouth of the river of that name, and an unimportant and recently established village at the disembouchure of the Curarai.

On the north-east bank, are the villages of Napo, Aguano, Santa Rosa, and Suno; and inland, the larger ones of Archidona, San José, Avila, besides Baeza, Papallacta, Tena, Loreto, Concepcion, Payamïno and

Cotapino. The Concepcion men are generally finer—taller and more massive—than the others.

The dress of the Indian usually consists of short, close-fitting drawers, and sometimes a "*poncho*" of "*lienzo*," the common raw cotton cloth made by the Indians of the highlands.

The women use a piece of the same cloth wrapped round their loins and reaching to the knee, and a jacket or shirt barely long enough to join the lower garment at the waist. The cloth is generally dyed by themselves, a dark dull claret colour, but also occasionally, with the wild indigo, blue. Ornaments of feathers, seeds, beads, teeth, &c., are worn, sometimes in profusion, especially on festive occasions; and for attending "church" some of the men have a pair of trousers. Bracelets and armlets of iguana skin are much affected, as in some parts of Central America, with the same association of their imparting bravery and pugnacity to the wearer.

For warfare, these Indians keep no arms; but for hunting they use "*bodoquera*" and lance; and though timid towards man show no fear of animals. The making of the "*bodoquera*," or blow-gun, is a work of great patience and merit. A good piece of "*chonta*" palm, the hardest palm found in the country, is selected, and a groove cut into it with a knife, to a length varying from seven to nine feet. This groove is then scraped and rubbed with sand, finer and finer, until it assumes perfect smoothness. Another half tube, exactly similar, is next made; and the two are bound together with wax

and fibre, the result being a long heavy pipe with a bore about three-eighths of an inch in diameter, which upon examination proves to be almost as true and polished as a gun-barrel. Through this the insignificant looking, though deadly, little poison-tipped darts are blown with unerring precision, conveying silent and sure death to their mark.

Though nominally Christians, these simple and inoffensive Indians attribute many of their ills to the puffing of invisible darts into their bodies by evil, designing persons—an idea no doubt suggested by the mysterious and silent operation of their own instruments of offence; indeed—animals struck with the poisoned dart, frequently hardly notice the small puncture so deadly in its effect. As evil influences may be blown in, so they imagine, may they also be blown or sucked out of the body; as also that rain and storms may be blown away by the mouth.

One of the Indians who travelled with us afterwards, for a couple of weeks, during very stormy weather, thought he might succeed in decreasing the tempest by blowing, which he did to his utmost strength. Unfortunately the squalls increased; and we derided his action, our banter apparently giving birth within his mind to some doubts as to the efficacy of blowing, and to the consciousness of its absurdity. May not our "whistling for wind" be a remnant of some such analogous superstition?

Weddings are usually celebrated by three days'

festivity, consisting principally in *chicha* drinking, with singing, dancing, and music, kept up incessantly day and night.

The chief instruments are the drum, already spoken of in Canelos, and a fiddle, hollowed out of a single block of wood and doubtless originally copied from the Spaniards. It is almost needless to say that the music has neither melody nor harmony, save that of excruciating the ear with its discordant and meaningless thumps and howls.

The burial of the dead is usually effected in the floor of the dwellings, to which I have already referred in describing our abode; and often the remains of beloved children or other relatives are disinterred when in a horrible state of decomposition, so that they may again be bewailed and mourned over. This we were informed had been the case shortly before our arrival at Aguano in the very hut we appropriated, and over the sepulchres in which our beds stood.

The deceased Indian is usually buried in his canoe, or a length cut from it sufficient for the purpose, dressed in his best, and with a supply of *chicha* and other food to stave off any pangs of *post-mortem* hunger, which may, according to their views, overtake the corpse. Occasionally, a wife may be seen at her dying husband's side sewing a pair of new trousers for him to make a respectable appearance in on his entry into the next world.

Marvellously dexterous and quicksighted in the woods

to our eyes—although much beneath any of the "Infieles" in this regard—the Upper Napo Indians are also clever canoemen and fishermen. Fishing is performed with hook and net, the latter being the more interesting. Several nets are taken, of about five feet in breadth by four or five yards long, and stretched across the mouth of any of the numerous creeks in the large sand or shingle-banks where the presence of fish is noticed; the upper edge of the net buoyed, and the lower sunk. As soon as this is adjusted and the exit of the creek thus quietly barred; two or three men beat the water, and thus cause the fish to rush towards the net, where they get entangled and are taken out of the water by hand and dexterously thrown ashore by those stationed along the net to catch them.

In this manner sometimes large numbers of fish are caught with remarkable rapidity.

Great difficulty has been experienced by the authorities and missionaries in getting the Indians to live permanently in villages, the only way by which education can be rendered effective among them. They have evidently not quite abandoned the more nomadic habits of the wilder tribes, and are always desirous of roaming; and for the least cause, abandon house and village at a moment's notice, moving family, bag and baggage to another locality. This has always been the greatest obstacle to the missionaries; and even now nearly all the Napo Indians have besides their house in the village, and perhaps a small plantain and cassava plot in the

neighbourhood, a plantation and shanty at least half-a-day's journey distant, hidden in the woods, where they frequently like to remain. Here they invite and see each other; but carefully keep out of the track of strangers. This is, however, not all, for most families have a third spot, unknown to any but the immediate family circle, and so hidden away that no track shows the way to it. It is in this secluded retreat that those who twist fibre and do other similar work, in which there is some trade with Quito, execute their labour; and I am informed, there economise clothing by dispensing with it altogether. This is easy to comprehend, for clothing with all savages is primarily looked upon as mere embellishment, though Indians who have frequent communication with more civilised men begin to show some shame when entirely nude.

The Napo "Indians" are very jealous of their women, and dislike extremely to see them in any communication with "Viracuchas," the name prophetically given by the Inca Viracucha to the coming conquerors of the country, and still retained in the Oriental Province, and habitually used towards all white men. The men try to make their women believe various false reports unfavourable to the whites so as to induce them to hold themselves aloof from the objects of their jealousy, and more than one of the fair sex were beaten for looking too curiously at us on our arrival at Aguano.

Among the most important events disturbing the usual routine of village-life, are the voyages to the river

Huallága for salt, and for poison from the Marañon. The voyages are commenced about the end of June, or beginning of July, and the salt-mines of Chasuta reached by about the end of August, so that the salt may be excavated from the river bed, and the return journey effected before the waters of the Huallága begin to rise, which takes place towards the end of September. The season of floods on the Huallága and Ucayáli seem to correspond with the season of lighter currents on the Napo, which favour the up-stream journey—or rather, perhaps, to speak more precisely, render it practicable—and enable the salt collectors to complete their tedious journey by November. It would be difficult to describe the terrible toil of this journey, lasting from five to six months. Paddling down stream is comparatively easy work, but punting up against the strong currents of the Marañon and Huallága, cutting out the blocks of rock-salt without adequate implements, and then poling the heavily-laden canoes up the Napo, form a labour which only an Indian could endure. From early morn till dark these men stand at their poles, two, three, or four in the bow of the canoe, according to its size, straining every muscle to force the heavily laden craft against the unyielding current, winding along the shallower banks where their "*palancas*" find bottom, and only varying the exercise where a steep bank is encountered, when the current is too strong to stem, to drop the poles and vigorously ply the paddles until the other side of the broad river is reached and punting again

resumed. These crossings are frequently very trying, especially on the Marañon, or wherever the channel is very broad, for the rowers dare not stop to get breath, but have to ply and ply in desperation, often to see their unwieldy and deeply-laden craft carried back by the current in crossing as much as they had gained in a half-day's hard and weary toil. At the long "Chimbadas," as they are called on the Napo, the men frequently reach the opposite bank utterly exhausted for a short time. During these journeys their hands and feet get covered to an extraordinary thickness with horny skin, such as I have never seen before, which sometimes splits in huge gashes from the excess of strain put upon it, causing torture to the sufferer who still has to labour on. The food on the voyage consists principally of *chicha*, of which a large supply is taken in baskets, having first been enveloped in plantain leaves. A portion of the supply is buried on the way down the river for use on the return journey, when the *chicha* is dug out of its hiding-place, only too often to be found in a state of decomposition, like some of our far-gone Stilton cheeses: nevertheless the food, as with us, is not disdained on that account. In the one case, however, our feelings are of repulsion, but in the other of fondness for the musty decomposing cheese. Such is the perfect balance of the unprejudiced and civilised sense!

And what do these toilers get for their labour, endurance and privation, unceasing for a period of six

months? Thirty or thirty-five *varas* of common *lienzo* is the current payment for each man, when the journey is made on account of a trader or missionary. The cloth being worth 1½ reales, or about 6*d.* a yard, the total payment comes to less than 18*s.* Out of the thirty yards of cloth, moreover, the recipient generally makes 2½ yards into a *poncho*, 1½ into a pair of drawers, 6 into a "*toldo*," to protect him from the voracious mosquitoes of the Marañon. The remainder in most cases probably goes to wife and children, and thus the earnings are employed before the journey commences, and the cloth is often worn out before the voyage is completed.

At starting and arriving, festivities of the usual class, in which *chicha* drinking constitutes the main feature, are carried on, and the travellers shove off their canoes in setting out, and hail their friends, as they heave in sight on returning, with the sound of the cattle horns procured from the Marañon, and upon which they blow. Were the journey commenced or completed without tootooing on the "*bobona*," the travellers would be considered to cut but a sorry figure, and, to say the least, would pass among their friends as unsophisticated greenhorns, destitute of the noblest attributes of a great traveller! Most of them would rather suffer anything than return to their native village unannounced by the *bobona*.

Besides the never-failing *chicha*, made from the cassava root, as already described, the Napo Indians

employ an ingenious method of mounting a still for the distillation of spirit from plantains. One of their largest sized earthen pots containing very ripe plantains, boiled and mashed, and in which fermentation has gone on for a short time, is placed over the fire upon the regulation three stones. Over this pot is stood a similar one, with a narrower neck and its bottom knocked out, and on this another still smaller, likewise without bottom, but with, further, a hole in its side, through which a bamboo tube is inserted. The third and uppermost pot has then a fourth stood in its mouth to close it, and the steam rising through the tier of pots is condensed on the under surface of the top vessel, which is constantly having cold water poured into it in exchange for the warmer water that is removed. Then, as the bottom of the cooler at the top converges to a point, as do all their cooking vessels, the drops condensed upon its under surface trickle down to the centre and lowest extremity, and, falling into the bamboo tube, are conveyed to a receptacle outside, where rarely more than a few drops are allowed to collect before they are transferred to the lips anxiously awaiting them. Of course the distillation is made at a low temperature, and all the cracks in the apparatus are stopped up with fine clay.

Notwithstanding these and other proofs of intelligence and steps towards advancement, the mental capacity is very low and indefinite. One of the missionaries informed me that some Indians who had been sent by

him to Quito were despatched thence again with edibles and a letter for him.

When they arrived, according to the letter they had brought, he found a great portion of the provisions missing, and forthwith accused the carriers with having appropriated them. They were very much astonished that he should know from the letter what they had done on the way, and confessed the theft, saying that no doubt the letter must have seen them after all, though they had carefully covered it up in a hole with leaves whilst they were eating the provisions; they now thought, however, that it must have seen them through the interstices. They thought it very natural that an object that could speak to the *padre* and relate what they had done on the road should also be able to see what had occurred close to it.

CHAPTER XIII.

AGUANO—THE ZÁPARO INDIANS.

Two weeks had passed since the visit of the Záparo, who had promised to fetch some of his tribe, and we had given up all hope of his reappearance. We were therefore overjoyed to see an Indian appear on the other side of the river signalling to us. We immediately took over our canoe to fetch him across, and upon approaching, found to our great delight that it was our Záparo friend who had fortunately only fulfilled his promise too well. We paddled over to the village again and there heard his tale. Upon reaching the Supinu, where he had left his horde, two days' journey from Aguano, he had found that they had nearly all gone to the Nuganu, four days' journey farther off. He immediately followed, and had brought them all back with him to a spot near the Arajuno, where they had met an "Indian," who told them that small-pox was raging on the Napo. At this news, his people were naturally at once for turning back; but he prevailed upon them at least to wait there whilst he came on alone to ascertain the truth of the

report. Under the circumstances we were compelled to assure him, without going into further details, that although all the Indians had fled, there was no disease among us; so, without even waiting ten minutes for rest after his thirteen days' foot journey, he again set out, with a couple of boiled cobs of Indian corn in his hand to eat on the way, reached his friends again the same night, and reappeared with nearly the whole horde, men, women and children, the next day.

The *padre* and Mr. Sarkady had just left for Santa Rosa with the "*curaca*" and two or three other Indians who had at last also arrived to redeem our prisoner, leaving me to arrange matters with the Záparos and Llore, whom, after considerable difficulty and persuasion, we had induced to accompany us to Iquitos. He was a most valuable acquisition to our party, as one of the few men who knew the entire river well, having spent two or three years roving about its course, chiefly exploring for indiarubber. He was moreover conversant with the ways of the Záparos—relatives of his mother-in-law—their language, and also Quíchua; besides being a most expert hunter, and a canoeman such as only are those of the Esmeraldas river, on the west coast, whence he hailed. We could not have secured a better companion, or one more able to furnish us with correct information.

Before proceeding with the narrative of the voyage down the Napo, I will give a short account of the

Záparos (who are also to be our travelling companions) and some of their habits and customs.

The name Záparo signifies a kind of basket made of double wickerwork of split "*bejuco*" (*liana*), with waterproof leaves between, and a lid of the same material to cover it. It is used by the Upper Napo and Záparo Indians to keep their clothes or chattels from wet.

The Záparos occupy chiefly the Curarai and its tributaries the Nushinu, Nuganu, Supinu, &c., the main river Napo in the neighbourhood of Sinchichicta, and the Yasuni. Their language is unpleasant to the ear, and its sounds are very indistinctly articulated, making it a difficult, and to a stranger at first almost an impossible task to define and catch the exact pronunciation of their words, many sounds being, as it were, withheld in the mouth.

Each word of a vocabulary of the language which I have formed, and which will be found in the Appendix, was a labour of itself, and some correctness could only be attained by frequent use with the natives themselves of a word once picked up and understood. Frequent questions to these Indians—or, if I am to be technical, I must call them "*aucas*"—appear to them trivial, and only call forth random and useless answers. As, however, later on it was my good fortune to meet another intelligent person, besides Llore, who had lived with them and spoken their language from childhood, I was able to revise all my pronunciations.

The Záparos have the fame of being the most expert woodsmen and hunters, and are very particular in keep-

ing up their activity and precision in throwing the lance, with which they are most dexterous in offence and defence, guarding themselves with such perfection that almost a shower of spears is warded off by a single individual. They keep up their practice not only in the necessary and frequent use they make of their weapons in hunting, but also in occasional human onslaughts, and in private exercise amongst themselves. Besides the lance, they also use the blowgun; but as they do not themselves make poison, and are most irregular and needy traders, they are often short of this necessity for their darts, and so have to fall back upon the spear as their only weapon. They are also expert fishermen, especially with nets.

Their perceptions of eye and ear are perfectly marvellous, and surpass the Napos considerably; and their knowledge of the woods is so perfect that they often travel by night in unknown parts of the forest. In seeking game they detect sounds and footmarks where white men can see and hear nothing. At a glance they know the number of animals, and the time at which they passed, though most of the tracks may be on loose leaves! But what to me appeared most wonderful in following game with these Indians, and also with others, was, for instance, that they would suddenly stop, and then, as if meditating or listening a moment, wave a hand in the direction in which one saw that the trail proceeded; next they would perhaps wave it crossways, as the case might be, as if mentally following the

animal's course, and seem to make up their mind as to the direction taken by the game, and they would then start off away from the track, but only to come upon it again by a shorter cut. This, it must be remembered, was not done where the animal was in hearing, or on ground known to them, but occurred in spots where they had never placed foot before. It has been suggested to me that scent might account for their discernment in thus finding and following a trail, and it is quite possible that this may be the case.

Their cat-like motions, the ease with which in their bare skins and feet they make their way scathless through thick, entangled underwood and thorns, and their silence, impress one with the true qualities requisite for successful hunting. To communicate with one another in the forest, they generally imitate the whistle of the toucan or partridge.

Very particular in their diet, they will, unless from necessity, in most cases not eat any heavy meats such as tapir and peccary, but confine themselves to birds, monkeys, deer, fish, &c., principally because they argue that the heavier meats make them also unwieldy, like the animals who supply the flesh, impeding their agility and unfitting them for the chase. Here we find the belief, common among many savages, that they partake of the nature of the animals they devour.

Being efficient hunters, the Záparos consume a much greater proportion of animal food than their neighbours the Napos, who stand in fear and respect of them, but

despise, or affect to despise them, as infidels behind their backs; for the Záparos, it will be noted, belong to the great division of non-salt-eating, unchristianised Indians, and are branded by the others, who are baptized, make regular journeys to Chasuta for salt, and speak Quichua, as "*aucas*," or heathens, savages, barbarians.

When Záparos meet Napos they take no notice of each other, and may stand together for hours without exchanging a word or the compliment of proffering "*chicha*," which is always practised in meeting individuals of their own tribe, however much unknown to them personally.

For hunting they keep dogs, which, although very unsightly, miserable-looking animals, are well up in their duties of tracking and driving game. It is considered on the Napo sufficient recommendation for the good hunting qualities of a dog to know that he belongs to, or has been trained by, a Záparo or Piojé, for useless animals are never retained by them. The method they sometimes use for training the dog is somewhat novel: he is taken out hunting, and if found not to have a good scent and naturally to fulfil his duties, he is led home again, and receives a dose of tobacco down his throat, and his nose and mouth are then also stuffed full of it, until he nearly chokes; this is to clear his scent and sharpen his perceptions, and the method from all accounts seems to occasionally succeed. He is then taken out again, probably the next day, with very rough

treatment, and if no improvement is shown, is discarded or choked altogether.

Tobacco is, among both Indians and Aucas, of the Napo and Putumayo, the sovereign remedy for almost all ailments, and is drunk in large quantities mashed in water.

The Záparos are by no means the apathetic, peaceful race they have sometimes been pictured, upon a slight acquaintance, by some travellers, probably on account of their wretched and abject appearance. When unprovoked, they are, like most really wild Indians, very shy and retiring; but are perfectly fearless, and will suffer no one, either whites or others, to employ force with them. They can only be managed by tact, good treatment, and sometimes simple reasoning; otherwise resenting ill-treatment, or an attempt to resort to blows, with the worst violence.

At all times they are changeable and unreliable, betraying under different circumstances, and often apparently under the same, in common with so many of their class, all the most opposite traits of character, excepting perhaps servility—a true characteristic of the Old World—and stinginess, which I have never observed in them. The absence of servility is typical of all the independent Indians of Ecuador; and their free-handedness may, I think, be looked upon as based more upon improvidence and apathy than upon active generosity.

One of the most prominent traits of this remarkable people is their tendency to, and marked en-

joyment in, the destruction of life. They are always ready and willing to kill, be it animals or human beings, and delight in such occupation; the only exception I noticed being the large alligators of the lower *cochas* or lakes, to which reptiles the Supinu Záparos manifested a strong disgust. But these were strange animals to them, though they eat a smaller species, in common with all the Indians of the Upper Pastassa, Napo, and Putumayo. Still, although they would not take part in the sport, they enjoyed, far more than some of the Napos, seeing the huge reptiles slaughtered. An invitation to follow and track out Napo *Indians*, who may have to be searched for by the authorities or missionaries (from whom they themselves, however, accept no authority), or to enter the territories of any hostile tribes where there might be prospect of plunder and violence, is accepted by the Záparos with a sort of grim and pleasurable anticipation, a manifestation of the mind so difficult to produce and rare to witness in any Indian.

In descending the Napo, the days and nights passed in the territories of the dangerous Auhishiris, on their side of the river, where other Indians would not have ventured on any consideration, our Záparos seemed to be in higher spirits and more contented than at any other time, and lay down to sleep on the sand, without roof and all but naked, with light hearts, after having scraped the points of their lances of *chonta* and bamboo and stuck them in the ground by their sides.

On one occasion we asked some of them if they, like the Jívaros, had any dried human heads in their possession. They answered in the negative, adding that, if desired, they would kill some Nushinus (a horde of their own people) and bring in theirs. Of course this was prohibited, and the idea strongly discouraged.

The Záparos are very disunited, and wander about in separate hordes, the worst of which, though not the most uncivilised, is said probably to be that of the Supinu and who came to us. These are the terror, at times, of the Nushinus and Mautás, the former of which, as I was informed, they not long since fell upon, killing many of the men and robbing the women, children and their chattels, the second either for use as servants or for sale.

A boy or girl stolen by them is currently sold to traders for, say, a hatchet, a knife, a couple of yards of coarse *lienzo*, and a few fish-hooks, needles and thread, or any special article they may most stand in need of, the whole value usually not exceeding eight to ten shillings.

The stealing of women is also carried on even amongst themselves. A man runs away with his neighbour's wife—in much the same way as occasionally occurs in civilised communities—or one of them, and secretes himself in some out-of-the-way spot until he gathers information that she has been replaced (which practically amounts to a divorce), when he can again make his appearance, finding the whole difficulty smoothed over.

In their matrimonial relations, the Záparos are, as in the practice of all their customs, very loose—monogamy, polyandry, polygyny, and promiscuity all apparently existing among them at the same time. Entirely contrary to other neighbouring tribes, they are not at all jealous, but allow their women great liberty, and often change their wives in the manner above named, or by simply discarding them, when they are perhaps taken up by another. Of course all the hardest work is done by the women.

Courtship is sometimes carried on in a novel manner. The matrimonially-inclined swain goes into the woods and hunts. On his return, his sport is thrown at the feet of his elect, and immediately afterwards sufficient firewood for cooking the same. Should the dusky maiden arise and employ herself in cooking his game—and they are seldom backward in taking plain hints of this nature—he may consider himself an accepted suitor. The banns are published, and the knot tied, for better or for worse, by this simple expedient. But should the tender maiden, or the seasoned squaw, as the case may be, disdain the hunter's offer, he may yet find consolation in the shape of some other Zápara who may step forward more charitably, and take upon herself the culinary and other concomitant duties. Matrimonial engagements, however, are not always made in this way; for, as already stated, women are frequently taken possession of by force; and though they—sweet inconsistents!—may sometimes object, they do so all the time

consenting, and make no virtual difficulties: they in fact, no doubt, rather like being run away with.

The disposition of the Záparos, when nothing special occurs to annoy them, is happy; and when they are together at their meals, and one has gained their confidence, they chat and laugh a great deal, which latter our Záparos did with us upon the smallest incitation, maintaining, though, at the same time, some shyness when in direct contact with us.

Like all ignorant savages, they are very superstitious, and this forms the basis of almost all their disagreements and quarrels. For instance, if one of them dies or falls ill from natural causes, his death or illness is almost sure to be attributed to sorceries exercised upon his person by some secret or open enemy; and his friends often take revenge accordingly. The man most held in awe is the medicine man or *shimáno*, as he is called, who is more clever than the others in maintaining the idea of his capabilities to exercise sorceries and cures; and, in consequence, the others are afraid of incurring his evil influences, and fear to do him harm, all of which strengthens his own opinion of his powers. In all societies we sometimes see that the public need only evince belief in an individual's knowledge or power for him immediately to gain confidence or to over-rate it himself. Any illness or pain is usually attributed to an enemy having stuck invisible darts into the sufferer; and the medicine man will then be resorted to, and he extracts them from the patient's body by

suction with the mouth, and exhibits them, just as the clumsiest conjuror might do with us, having previously concealed them in his mouth or about his person. Even the *shimáno* himself, I firmly believe, does not think or know himself to be an impostor; his mind is so low that he entertains a kind of superstitious belief in his own shallow, deceptive practices—if indeed he has any belief at all on the subject, which seems to me very doubtful—just as a man who persistently relates an exaggeration or an untruth finally brings himself to believe it, and his statement thenceforth bears to him the stamp of truth.

The Záparos believe in a devil or evil spirit, which haunts the woods, and call him "*Zamáro;*" but whether they also believe in a good spirit or creator, I could not ascertain. In all probability they entertain the usual Indian idea in those parts of transmigration or metempsychosis: the valiant men being transformed into tigers or jaguars, and the pretty women into beautifully-plumaged birds; others into the animals most akin to their own characters. The jaguars and beautiful birds, however, always occupy the highest and most desired positions after dissolution of the human form.

When a mother having a very young child dies, the child is sometimes buried alive with her, as in a case brought to our notice.

A man labouring under chronic disease, and showing after a long period of time no signs of amelioration or getting about again, is not seldom throttled by his

friends, after their having held a consultation declaring him to have become a useless member of society, and a burden to his relatives. One sees here the origin of the often noted natural antipathy to sickness or disease which has been frequently stigmatised as an inheritance from the brute nature of our remote ancestors. Is it not more probably, in primitive communities, the simple anxiety to get rid of an individual who consumes but cannot produce?

The Supinus were in great fear of a single Jívaro, who has sometimes appeared among them, as usual, by night, for the purpose of robbery. They do not dare to avenge themselves upon him, apprehending if they were to do so, that the Canelos and other Jívaros might call them to account for it by attacking them. Many of them, otherwise fearless, once appeared at Aguano, fleeing from the "little one," as their Jívaro enemy was called.

Industry among the Záparos is at a very low ebb, and they are consequently very poor and almost nude; in their homes entirely so, as also when hunting at all times, with the exception of a single thin string girt around the loins. Hammocks, game-bags, and "*llanchamas*," a sort of blanket or covering made from the inner bark or bast of a tree, are their only manufactures.

Like the Piojés, they are addicted to drinking "*ayahuásca*," though not "*yoco*," in place of which they drink "*guayusa*," a leaf with properties similar to the well-known "*coca*." The first produces intense excitement,

and often leads to quarrels and violent broils, ending in corresponding exhaustion and depression.

There are several distinct denominations in the Záparo language for different stars, but in what their distinctions consist I could not make out: it is not the mere classification of planets and fixed stars. Time is always indicated by showing the height of the sun and the moon's position at sundown.

From the Záparos who came to Aguano we selected seven to perform the journey with us to the Marañon, and they were all summoned into our dwelling to receive the payment we proposed to give them, and the amount of which was based upon the rates usually paid to the Napos for similar work. The two chief men destined to steer the two larger canoes which we had succeeded in acquiring—namely, the man who had brought all the others to us, and who rejoiced in the name of "Siso" (mange), and the medicine-man, or "*shimano*," called "Curi" (gold), his brother, received thirty *varas* of *lienzo* each; "Rúmi" (stone), "Atiójó" (mosquito), and one whose real name they would never tell us, doubtless on account of its being one they did not feel proud of, twenty-five *varas* each; and two young men of probably about seventeen or eighteen years of age, though strapping young fellows, "Ushami" (large-eyed), and "Ashiñájá" (pium fly), twenty *varas* each.

If we had given them all considerably less it would have been just the same, for such a quantity of cloth

they had never before received at one time, and its length went utterly beyond their powers of calculation. They were accompanied by all their friends, women and children, and stood huddled together, very shy, and as villainous-looking a set as I ever beheld.

Siso was bald, squinted, and his skin was scaly and blotched all over with black, the result of a skin-disease common amongst all Indians of the higher Marañon, called "*caráte.*" The "*shimano,*" his brother, was even worse looking, having a stronger squint, his long hair all matted over his head and face, and a halting gait from a skate wound on one instep. Rúmi was a tall finely-made man, but could never divest himself of a cut-throat expression of countenance, and had eyes which always avoided straightforwardness in direction and expression. To the "no name," although of quite different physique, the same description would apply as far as it goes; but this one betrayed more of the Mephistophelian cunning, whilst the former developed more of the Bill Sykes style.

Atiójó, Ashiñájá (Rúmi's brother), and Ushámi, the three younger ones, were not so bad in appearance as the others, but were far from being Apollos, or even as good-looking as the average of Napo Indians.

Siso and Rúmi had five wives—two each, and one in common. All of them were almost naked; their faces hideously painted in the most diversified manner, and without any regard to symmetry; some simply smeared all over with bright red, and others with bluish-black;

the women in scanty miserable rags, and the children "*en cuero.*" Altogether, they seemed to care less for ornamentation of the person than any other Indians I had seen, only one of them having a necklace of monkeys' teeth. And these were to be our travelling companions for several weeks, and under whose care and guidance we were to place ourselves!

But the force of habit is great; for after enjoying their companionship for a few days, notwithstanding some trouble they caused us, we soon got accustomed to their evil looks, and by the time our journey was ended I felt quite sorry to leave them, and would gladly see these poor, miserable and murderous savages again. Murderous they were, being the identical ones who had made the onslaught already spoken of upon another horde of their tribe for the sake of robbery and violence.

Each of our chosen guides was called forward to hold the stick upon which his "*lienzo*" was measured out to him, and the *varas* were counted out:—*Nucuáqui*, one; *anamishiñáqui*, two; *aimucuraqué*, three; *manucuaquicuajuotsa*, four; *manucuáqui*, five; and *mánunu*, *mánunu* (many, many). All above five is simply expressed by "*mánunu*," and few Záparos grasp the number expressed by the exhibition of both hands, and still less by hands and feet.

As each one received his payment, as if in wonder when we were going to stop such interminable counting, with the addition of a common "*machéte*" he slunk

behind the rest to see the same performance gone through with his companions; and I am quite convinced that none of them ever knew that some had received more yards of *lienzo* than others.

This ordeal completed, Llore's mother-in-law, who was originally one of their horde and related to some of them, gave them a most energetic exhortation, in which she told them that they must treat us and her son-in-law well, and on no account abandon us on the way, or in any way fail to look after our safety and welfare on the journey. For, she threatened them, if they did not behave well and bring him safely back, they need never come to her again for *lienzo*, knives, poison, or any other commodity.

She spoke with great vehemence, and they evidently listened to her with attention and respect, appearing like schoolboys under a rating for misconduct. She was the most intelligent of their horde, in fact remarkably so; and having married a trader, was often able to assist them and supply their greatest wants. They held her in great consideration, and looked up to her, allowing her great influence over them.

I must here again call attention to what has been said in a previous chapter on the subject, and would remind the reader that all the peculiarities and characteristics which I have adduced, not only in respect of the Záparos, but also of other Indians, should not be—and I think this rule probably applicable to the portrayal of the habits of all savages—looked upon as fixed

and definite customs from which little deviation will be found. Quite the contrary; as certain peculiarities are manifest and occur before some observers, entirely antagonistic or inconsistent ones may be noted by others, and thus doubt may fall upon the reports of all. But although I will not deny, nay, can even strongly affirm, that many observers are too prone to give merely the interpretation of their own feelings to social and even many natural phenomena, I would wish to be borne in mind, when savage customs are being treated of, the inconsistency, vagueness, and superstition which pervade the savage's mind and actions.

CHAPTER XIV.

AGUANO TO THE AGUARICO—THE PIOJÉS.

ALL the Záparo men were set to work to cut and crush some sugar-cane we had found, so that we might boil down the juice and supply ourselves with molasses, in lieu of sugar, for the journey, and the women and children were sent to seek cassava (yuca) with which to manufacture *chicha*, in the same manner as described in Canelos, for their husbands.

A most pitiable occurrence took place. A Napo Indian had arrived from San Rafael on the Coca, whither he had fled from the small-pox with his wife and child; but there, with the others who had fled with them, they contracted fever. He and the woman were so ill and weak when they arrived at Aguano in their little canoe that they could hardly stand. A dose of quinine, among other remedies, was administered; and the man immediately afterwards on his own account took a pint or more of tobacco-water. The next morning the wife died and left the poor man with the little baby of some three months old, he himself so weak that he was utterly un-

able to bury her, and the child being of course deprived of the sustenance which only its mother could supply. It was the most touching funeral I ever beheld to see this poor father bowed down with illness and grief, bearing with difficulty his helpless infant to witness the interment of his wife; and no relatives, friends or companions near. The inevitable fate of the child and the probability of his own were only too apparent. Where life is so precarious, one can hardly condemn the Záparo father who in such a case buries his young child, before it dies, with the dead mother.

On the third day after the Záparos' arrival and our long involuntary stay of forty-two days at Aguano we at length started downward, but only to turn back immediately, owing to the canoe I was in with Llore being so top-heavy with the "*pamacari*" (awning of cane and leaves) which we had constructed upon it, that it rolled from side to side and almost filled with water. The roofing was soon discarded, and a fair start made again to the music of the "*bobona*" for the benefit of our friends on shore and the companions and families of the Záparos, who had nearly all besmeared their faces and hands with a new coating of war-paint for this auspicious occasion.

Santa Rosa was safely reached by evening, and after our last meal with the *padre*, we again set out the next morning—he for Aguano with his Indians, and we for the Marañon with our Záparos. We parted from the *padre* with deep regret—a man we had learned to like

and respect, an agreeable companion, a generous friend, and a strict upholder and energetic follower of his calling and duty.

The first night we slept on a sandbank a little above the branch river Suno, where the Záparos caught us a large supply of good fish. Añangollacta (Place of Ants),—where the village of Santa Rosa formerly stood, but which was abandoned owing to the inroads of swarms of ants,—the deserted villages of Suno and Coca, where our Záparos helped themselves to the Indians' drums they could find, were all passed; and after five days' canoe journey we reached Sinchi-chicta without seeing a sign of a human being anywhere. Here, however, we found a number of Santa Rosa Indians who, like the rest of their village, had fled from the small-pox.

During the journey down the river we always set out at daybreak; and towards the middle of the day stopped on one of the numerous sandbanks to breakfast, and to give the men a rest during the hour of vertical sun. This rest for them, who wore no hat or head-covering of any description, was very necessary, although for us it was not the most agreeable breakfast hour—between twelve and one o'clock—on a glaring, white, shadeless sandbank, with the vertical rays of the scorching sun upon us and reflected from the surrounding water and sand. Added to this there was a hot fire and the necessity of carrying on culinary operations in its immediate vicinity, which tended to call our salamandrine qualities into

requisition. I certainly think I have never felt so hot. The cooking completed, we would fain stick a large palm-leaf of our canoe-covering obliquely into the sand to shade our heads a little whilst eating. Sometimes the sand was so hot that it was quite unbearable to the Záparos with their bare feet, though these are not by any means sensitive.

On almost all the sandbanks, which are of enormous size, driftwood is found in great abundance, so that there is no difficulty in making fire for cooking. As much as we had been stinted and in scarcity of food, and especially of animal food, on the whole journey from Baños till now, so did it become plentiful from the Coca downwards; and I cannot help thinking that something must have been wanting in Professor Orton's party when he passed this way; for he says in his book, 'The Andes and the Amazons,' that they might have starved in descending the Napo had they not had provisions with them. These are undoubtedly very necessary; but below Santa Rosa animal food is most abundant, and easy to procure from the forest. Every day we killed far more game than we could possibly eat, and frequently took fish enough to feed thirty or forty people to repletion. Pavas, the so-called turkey of these parts, Curassow birds (Piurí and Paují), macaws (Guacamayo), partridges, parrots, pigeons, herons, ducks, geese, peccaries—and monkeys for the Záparos—were always so abundant that we never killed or attempted to kill half of what we descried. Sometimes for breakfast we

would make a soup for three persons out of four or five pavas or paujis—mostly in splendid condition, young and fat—taking large thick slices from the breast first, to fry in place of a beefsteak. Occasionally a whole peccary in addition was wasted in a day, and, notwithstanding that our Záparos consumed an enormous quantity of meat, and were required to do no hunting for themselves, more than half our supply was always thrown away uneaten. In all we were eleven persons; and the birds, almost without exception, were shot by one gun, that of my companion, Mr. Sarkady, a most ardent sportsman. This too without much delay; for where birds were detected, we merely stopped a few minutes to give him time to land with a Záparo, who would point them out in a moment; what was immediately at hand was shot, and the road resumed.

As soon as day began to draw to a close we began to look out for a comfortable sandbank upon which to pass the night; the canoes were hauled up and secured, an abundant stock of firewood collected, the tent pitched, and preparations made for the evening meal and the sound, healthful sleep which invariably followed. The Záparos sometimes made temporary shanties by sticking a few stems and leaves of Pindo—or elephant-grass—slanting in the sand; but when this was not close at hand, they more often slept on the bare ground, with only a piece of *licnzo* round their loins, and no further pretence to covering or protection of any description beyond the canopy of heaven. Each man always kindled

his fire, and there was one to spare, so that they could sleep in a row, a fire and a man alternately, to keep both back and stomach warm. The fires were always kept low, but never allowed to go out till morning; and during the night as soon as the embers began to cease to give heat the men felt it, and stirred and blew them into flame again, immediately afterwards resuming their sleep. At the very first streak of dawn, as if by one accord, the Záparos all awoke and began to move about. Even when the moon was full and commencing to wane, thus giving a strong light till morning, they in their sleep, as I had occasion to specially observe, seemed to know when day was about to break, better than I did who was sitting up and watching for it; though as yet not a streak or sign in the east announced the dawn, nor was any difference discernible in the light which the moon had supplied equally throughout the night.

We passed one night on a bank near the mouth of the Tiputini, a river entering the S.W. bank of the Napo, and famous for the number of jaguars said to haunt its vicinity; and in effect, on our "*praya*" we found quite recent tracks of a large and a small one following a deer, which had passed only half-an-hour or so before our arrival. After dark we distinctly heard the crafty cats in the forest hard by, and therefore laid out a peccary's head, poisoned with cyanide of potassium, at the margin of the forest, in the hope that they might eat it. Morning however found it untouched.

The Tiputini is inhabited by a tribe of "Aucas" called Meguanas, who it seems are at enmity with the Záparos, but we saw nothing of the former.

On the seventh day from Santa Rosa our stock of plantains and yuca had dwindled down to almost nil, and we had no farinaceous food that would suffice for all. We therefore particularly wished to enter the River Aguarico, where we could probably obtain a fresh supply from some Piojés who had plantations there. Our Záparos were expressly informed of this, so that they might not pass the river, for three of them knew it perfectly well. For some reason or other, probably on account of the delay it would cause, they were very averse to our entering the Aguarico, as we afterwards discovered; and I give the circumstances of the case, as it serves to illustrate their character.

As the banks of the Napo show great similarity, and the river constantly divides into and changes its many branches, Llore failed to notice the mouth of the Aguarico, although after a time he felt sure we must be very near to it, or have passed it inadvertently; and we therefore questioned the Záparos on the subject. They showed very little inclination to answer our enquiries; and at our repeated instance would only tell us vaguely that they thought it must be farther down. To make sure, however, we made them cross the main river, to their manifest discontent—for all the time they had been taking the canoes along the wrong bank—and we looked carefully along for the entrance we were in search of.

At last we came to a disembouchure, which Llore did not think looked like the Aguarico; but as the banks and vegetation alter so quickly by floods and rapid growth, and he had not been on the spot for more than a year and a half, he thought he might perhaps be mistaken, notwithstanding that he did not recognise the locality. In any case he was sure the Aguarico could not be further down, to judge by the distance we had already come from the Yasuní. We therefore called our three canoes together and asked the Záparos steering, who knew the river, if this was the Aguarico. Siso and Curi said sulkily that it was not; but Rúmi, who steered our canoe, affirmed that it was. In order therefore to satisfy ourselves upon the point, and to find out the huts of the Piojés, we determined to go up the stream, at least some little distance. Rúmi was obliged to stick to his affirmation and could evidently not see his way out of his deceit, so did not refuse to make the ascent with us. Those in the other two canoes however were evidently much incensed, and would not follow us at all; but remained behind and made fast to the bank. Thus matters were becoming critical and almost mutinous.

After going up against the current for about half-an-hour, Llore convinced himself, as did we also from the general appearance of the water and banks, that we were only in an arm or "chicta" of the main river; so we turned back, and joining the others again, all went over to a large sandbank to breakfast before making

further investigations. Curi, the "*shimano*" or medicine-man, was then called apart to speak with us; and we laid our case before him; for all the Záparos had now become markedly stubborn and discontented—a state not at all desirable or safe in our party, nor in any way likely to tend towards harmony and the successful prosecution of our journey. We told him firstly that, as he saw and knew was the case, we had no more plantains left, and could not get a fresh supply for certainly eight days to come, until we should have reached the mouth of the Curarai. This, we added, would not matter much to us, as we had a small provision of rice and sago for ourselves. But he and his companions would have nothing whatever but the meat we might chance to kill, as they had finished their *chicha*. They would thus be in a very disagreeable position, and we therefore wished to enter the Aguarico in order to get provisions, principally for their sake, so that they might be well-fed and contented. Llore then also told him that we were aware he knew perfectly well where the Aguarico was, and that they had no doubt brought us past it without saying anything so as to deceive us, because they did not want to go there, probably to save time. After we had been kind to them, and had given them *lienzo, machétes*, fish-hooks, and so many presents, and every day provided their food from our guns, so that they had not even had to hunt for themselves, they in return ought surely to do all they could for us, and not try to deceive

us: we never deceived them or stinted them in anything.

Something to this effect was spoken, and Curi listened to it quietly. He then paused, and at last seemed to make up his mind, and finally told us that we had passed the Aguarico on the previous bend of the river. We told him to communicate to the others what he had heard, to repeat that we thought it necessary to provide ourselves with plantains, as we should not be able to get them anywhere else for many days; and to ask them to unload one of the canoes for this purpose, which could be taken back to the Piojé settlement, and we would leave the others here with the main party to await its return. They spoke together a few minutes, and then suddenly commenced vigorously to discharge one of the canoes and to make preparations for the start. Good-humour seemed to have returned, to the exclusion of all ill-feeling; and from this time forward the Záparos appeared to have much greater confidence in us, and gave no more trouble of any kind on the journey, carrying out all our desires even with more goodwill than had ever been manifested previously. Thus by a plain exposition of facts, and an appeal to their reason in a way suited to their understanding, we established our authority and gained their confidence, so far, I think, as this is possible, and much more successfully than we could have done by any other means. Coercion they would certainly have resented in one way or another, the least of which would have

been to quietly decamp in the night and leave us to our fate, perhaps without canoes!

We had hardly started from our halting-place for the Aguarico when several canoes of Santa Rosa Indians issued forth from the very arm we had just been ascending; and as they had a large quantity of plantains with them, and agreed to barter some with us for *lienzo*, we returned again to the *praya*. They had five or six canoes, and their wives and children all with them. They told us they intended to make a long journey slowly right down to the Marañon, so as to get away from the small-pox; and said they wished to keep near us for the next few nights whilst passing the Auhishiri territories, which always caused them great alarm on account of the many massacres which had at different times been perpetrated upon others of their tribe and travellers generally. Some of the Piojés who were settled close to the mouth of the Aguarico they had seen on an island in mid-river, where they were hiding so as not to come in contact with people from above, whence they had already received news that small-pox was raging.

The Santa Maria Indians, or Piojés, as they are generally called on the Napo (from a word in their own language—*piojé*—the negation generally given to all who go to ask them for plantains, yuca, or any other article), occupy chiefly the Cocaya, Sancudo-cocha, the region near the mouth of the Aguarico, and Cajucuma, Paña-cocha, Angoteri, Oritoyacu and Tarapoto on the left

bank of the Napo. At all these places settlements of Piojés are known to exist; but it is also more than probable that there are many others as yet unknown even to the most pushing traders. The Piojés speak the same language and have some other traits—such as "*yoco*" drinking—in common with the Macaguájes or Piojés of the Putumayo, with whom they, however, are entirely incommunicated by the intervening territories of the distinct tribe known as the San Miguel Indians of the Upper Aguarico, Santiago, and San Miguel rivers. As the Piojés of the Putumayo know nothing of the existence of those of the Napo, so, I infer, are also these ignorant of the same language being spoken on the other river, a fact that seemed known to nobody, and which I was therefore rather surprised afterwards, when ascending the Putumayo, to discover.

The Piojés of the Napo are, of course, Aucas; but those who have been in contact with traders—to whom they supply hammocks in exchange for *lienzo*, knives, &c.—disclaim this title, saying, "*Auca no! Santa Maria runa, Quiristiano!*" (Not Auca! Santa Maria man, Christian!) Upon the approach of strangers, their first action is usually to indicate the nose with the fore-finger, and to blow and sniff through the nostrils to show their clearness and freedom from catarrh, saying, "*Huairahué, hudirdhué*" (Cold, cold); for after small-pox there is no disease they, and most other Indians also, fear more than colds and influenza. If they notice signs of the affliction, or sneezing, in their visitors, they

are alarmed; and if the latter is repeated they decamp. Whether there is any of the common superstition regarding reflex actions in this fear of sneezing, I do not know; but it is more probable that they have simply learnt that it is generally a precursor of the cold in the head they are so much alarmed at, and which with them so often results in influenza and death. The fears of a cold are well-founded, for with them it almost invariably assumes a virulent form accompanied by fever, a complication to which their mode of life and neglect of the commonest precautions —for they bathe to cool the fever, and commit other absurdities—are in most cases fatal.

The hordes of this tribe bordering on the Napo had since many years been friendly to strangers; but, it is said through the misconduct and violence of some soldiers who escorted two political prisoners from Quito to the frontier *viâ* the Napo, the Indians of Tarapoto have become untrustworthy, and recently killed two servants belonging to some settlers there. It is to be feared that this feeling may become extended throughout the whole tribe; and thus confidence gradually and laboriously established with natives, through years of difficulties, may be undone in a moment by an abusive or unstraightforward act. When we passed they had abandoned their large plantations of cassava, mandioca, and plantains at Tarapoto, and had retired farther back into the forest.

In dress, arms, and many habits, the Piojés differ

widely from the Napo Indians and Záparos. The dress of the men consists of a sort of bag or shirt of *llanchàma* reaching down to the knees, whilst the women wear a band of woven *chámbirá*-fibre, eight inches wide, round the loins, the body being painted almost all over. The ornaments are feathers, and necklaces of jaguars' and peccaris' and monkeys' eye-teeth.

Their arms are bow and arrow, and long spears of a quite different description to those used higher up the Napo. Here, these weapons are scraped to taper gradually almost to a point at the hilt; and the head end of the spear, which by degrees thickens, has another thin, sharp dart of *chonta*, about three inches long, inserted into and bound to it. This dart is besmeared with poison; and when the lance is thrown at any animal it breaks off in the flesh, to facilitate which it is usually cut half through at the base. The lances are generally carried in bundles of from five to seven; each dart-end has a reed sheath, and the whole bundle a larger one of bamboo to protect the poisoned points. The Piojés also use "*macanas*," or blunt swords or clubs, usually made of *chonta* palm.

Their dogs are large and well trained for hunting, as I have remarked before.

The Piojés, compared with most of their neighbours, are an industrious tribe. Their plantations are large and well cared for, besides which they twist fibre and make a considerable number of hammocks, working and travelling frequently by night. For the better per-

formance of this nocturnal labour, they drink "*yoco*" as a refreshing and anti-soporific beverage, which I shall describe further on.

In crossing the South American continent from west to east through Ecuador, it is here that we first find under cultivation the poisonous species of mandioca; and from the Aguarico downwards to the Marañon, it is much more abundantly grown than the sweet cassava or "*yuca*," as the Spanish South Americans call it (*Manihot Aipi*), one of the staple foods of the western lowlands and the lower eastern slopes of the Andes of Ecuador. From the mandioca, the Piojés make a dry cake, by grating the tuber on a rough, thorny palm-root, massing the fibrous meal thus obtained, and then baking it in thin cakes, not unlike the unleavened bread of the Jews in appearance, but without the blisters. "Cassava," as these cakes are designated on the Napo, constitutes an excellent provision, on account of its lasting for a long period without deterioration.

Like the Záparos, the Piojés also drink *ayahuasca*, mixed with *yajé, sámeruja* leaves, and *guanto* wood, an indulgence which usually results in a broil between at least the partakers of the beverage.

In their sexual relations they have some, to us, very abhorrent customs, amongst which one is that a widow often takes her son to replace the deceased husband; and a widower his daughter, upon the death of his first wife.

Those Piojés who occupy parts of the Napo not

distant from the Auhishiris are naturally subject to the attacks of that aggressive tribe. One such assault took place quite shortly before our descent of the river, as related to us by the *padre.* As that missionary was ascending the Napo in his canoe, he suddenly observed a number of savages, which he estimated at seventy or eighty, on two large rafts, just in the act of crossing the river towards its right bank, a little below the Aguarico; and before he could come up with them, they had landed and escaped into the forest. Upon arriving at the Aguarico, the Piojés informed him that the band he had seen had attacked them, wounding some—whom he saw—and carrying off all their iron implements and valuables. On other occasions they had also carried off some of the women.

CHAPTER XV.

THE AGUARICO TO THE AMAZONS.

CONTINUING our long canoe journey, we spent a night at a spot called Santa Maria, where a massacre of Piojés by the Auhishiris had also taken place; and from there another long day's paddle, and an hour the following morning, brought us to Paula Cocha, which we intended exploring. We settled on a sandbank, opposite the entrance of the Cocha, or lake, on an island called Auhishiri Island—for behind it is the mouth of the Auhishiri river—and unloaded the lightest of our canoes. Leaving the youth Ezequiel with four of the Záparos on the bank, to take care of the other canoes—the former with strict injunctions to fire a gun to summon us if any Auhishiris should appear—and enjoining a good look-out, we started for the Cocha. Ezequiel did not seem much impressed by the security of his position—being left alone to keep watch with four Záparos, in whom he by no means felt strict confidence, against a worse enemy—and a circumstance that did not tend to comfort him was that we had found footprints of the previous day on

the sand between the river and the forest, and which probably belonged to Auhishiris, since no other passing Indians would have ventured there. However, we gave instructions that the canoes should be shoved off from shore and a retreat made to the other side of the river, if any one should appear at the margin of the wood. The Auhishiris only cross the main river on rafts, their canoes being of a most miserable description, consisting of the hollowed stem of the *bombona* palm, the ends stopped up with clay, and incapable of carrying more than two persons. To tell the truth, we were rather more anxious that the Auhishiris should show themselves than not; and for this reason we always encamped and delayed on their side of the river. We were very desirous to see some of this redoubtable tribe, so much spoken of and dreaded by all; and we felt little doubt but that much of what we had heard in their regard must be exaggeration, inasmuch as they are stated to be like beasts in ferocity. One is said to have been caught some time back and to have refused food, biting and tearing himself and any one who came near him, until he pined away and died. Such is one of the accepted accounts, authenticated by the names of the captors whom the traders knew, but which I do not call to mind, and I merely give the story for what it may be worth and should like to have seen its confirmation before placing much reliance upon its correctness.

Paula Cocha consists of a rather narrow creek of black water, almost filled with aquatic weeds and obstructed

by fallen trees and overhanging boughs. Rather less than a mile up, the stream divides into two branches, of apparently about equal dimensions. We continued, firstly up the one to our right hand, until, after a short distance, we were obliged to turn back, as the passage was entirely blocked up by fallen trees and overhanging branches. The other creek was then ascended for a distance of over a mile, when the same difficulties were encountered; though this channel certainly was superior to the other, and probably penetrates farther inland. Llore, who had already on a previous occasion been over the ground with other men, some of our Záparos, and some of the Santa Rosa Indians, all told us that Paula Cocha consisted solely of this forked stream, and that there was no real lake, although it bore the name of Cocha or lagune. Among the Indians, the idea, common to many similar spots, was current that the passage was barred by a huge Yacu-mama (mother of the water), as they call the Anaconda, stretched across the river.

We had, of course, expected to get into a real lake, and felt dissatisfied with the result of our exploration, especially as the sport had also been poor. On the right bank of the main branch, however, there was a narrow gorge, with very little water in it, in fact more like a large ditch than anything else; but this we determined to ascend to see what it might lead to. We penetrated it, forcing the canoe partly through the water, and partly through the mud and fallen and overhanging wood, and were amply rewarded for the labour by

suddenly emerging into a beautiful lagune of the character we had been so desirous to see.

It was a type of peacefulness and solitude, with a powerful overhanging sense of gloom. The water was dark and sombre, though reflecting the vertical rays of a bright sun; its surface was utterly motionless, though continually disturbed by innumerable fishes; its depth looked black and impervious, though in reality clear and transparent as crystal; the vegetation was lit up by the sunlight, yet heavy, and casting gloomy, weird shadows on the marginal water; and although a deathlike stillness seemed to reign, the discordant chatter of the crows in the trees and the dull splash of the terrapins as they dropped from their seat on the dead logs into the water, were heard at frequent intervals. All these apparently anomalous sensations will, I think, be understood by those who have visited any of the numerous, still, mysterious, black-water lagunes or *igarapés* of the Upper Amazons.

After thoroughly enjoying this scene, being the first of these *cochas* we had entered, and unconsciously almost fearing to speak aloud for fear of disturbing the repose, we made our exit, and reached the encampment again towards evening, to find all in order, and our friends, the Santa Rosas, just arriving *en masse* to pass the night on the *praya* with us, for the safety of themselves and families against the much-feared infidels. The evening was passed chatting with them, or rather, listening to their conversation with Llore, in the beau-

tiful, clear-sounding language of the Incas, for I could only understand occasional words—and amusing some of their pretty little children who were greatly pleased by the present of a few common beads. We told them that they must keep a good look-out for the "Aucas" all night, as we meant to sleep, and to wake us at once should anything occur.

The next day we passed inside the large Auhishiri Island and by the mouth of the river of the same name, the spot most feared on the Napo. In the evening we slept again on the right bank, nearly opposite Orituyacu, where there is a lake and settlement of Piojés; but still we saw nothing whatever of the Auhishiris.

Hence, leaving Tarapoto, already spoken of, on our left, we reached, in a tremendous thunderstorm, the village of Curarai, situated just below the disembouchure of the river bearing the same name, and with whose source we had become so intimately acquainted a few months previously. This little village is occupied by a few Indians from the Upper Napo—principally Santa Rosas, who have deserted their native places—and one white man, a Mr. Rodas, a Cuencano, occupied in trading with the Piojés and Záparos, at present collecting sarsaparilla with the horde of the latter who usually inhabit Sinchichicta.

Upon our landing, the whole village seemed to be quite deserted, though there were plenty of tempting fowls running about, which at once caught our hungry eyes. We looked through all the houses and at last

found an old woman in one and a little girl in another. We asked them to sell us a couple of fowls; but they, according to the general habit, averred no knowledge of the birds, whose ownership they also denied, and said they could therefore not sell them. However, we were not to be thus done out of our dinner, so a fine cock happening to pass across the trajectory of my rifle, I thought I could not do better than pull the trigger, which had the effect of knocking his head off. As he turned out to be very tough, he was presented to the Záparos, and another one of the "softer sex" was shot for ourselves, payment of course being deposited for them afterwards. The next morning, soon after dawn, Mr. Rodas appeared with some of the Indian inhabitants, in great alarm; and it was then explained to us that one of the latter had been in the village at the time of our arrival and had hidden himself as soon as he saw us land. Very shortly afterwards, as darkness came on, he had made his escape to where Mr. Rodas was, some miles distant, and had awakened him in the middle of the night with the story that some "Viracuchas" had arrived at the village with guns and "Aucas" (our Supinu Záparos), and were shooting the fowls; and that they had come down the river committing numerous atrocities everywhere. At this point of his narration he supplied from his imagination facts the repetition of which is undesirable. He then added that he and the women—the old woman of about seventy, and the little girl of seven or eight—were in fear of their lives! What a

terrible character was assigned to us! Llore and Rodas were old friends and connections, their wives being cousins, so all was soon explained and made merry over; and fowls, turtle, plantains, *yuca*, sweet potatoes, &c., placed at our disposal in abundance. In fact Mr. Rodas, a most intelligent man from whom we obtained much information regarding his many and long experiences among the Piojés, Záparos, and Jívaros, was throughout most hospitable, and even accompanied us down to Iquitos, so that our party was increased by his canoe and four more Indians.

In the day spent at Curarai, we made a large addition to our butterfly collection; for these insects, like on the upper part of the same river, were more plentiful than we had seen them anywhere else; especially several beautiful species of the genus *Catagramma*, round about the houses and open spaces.

From the village we went with Rodas down to Francisco *praya* where he had his encampment with the Záparos who were collecting sarsaparilla in the neighbourhood.

This being the season in which the turtle were just laying their eggs, we had on almost all the sandbanks found abundant supplies, from the Aguarico downwards. Nearer the mouth of the Napo, a great many turtle are captured for sale at Iquitos, where large numbers are consumed. Game, also, of all kinds had been plentiful from the time we left the mouth of the Coca, and we had shot numbers of Curassow birds, pavas, geese, ducks,

herons, egrets, macaws, parrots, pigeons, partridge, monkeys, peccari, and capybaras. The last named gave us some exciting chase with spears, on the sandbanks, where they were hidden away at dusk in the long grasses.

After passing Copal-urcu (Copal mountain), Tamburyacu (Drum river), both said to be inhabited by dangerous savages, and Puca-barranca (Red bluff), we came to Lagarto Cocha, which we entered. As its name implies, this *cocha* contains a great many alligators of the same species as frequent the Amazons, and quite distinct from the species infesting the Ecuadorian rivers west of the Andes. The former is a much more beautiful animal, its back jet-black, though when old frequently overgrown with a slimy green water-weed, and its entire underside yellowish white. Between the two contrasting colours, the connection is made in large mottles, either colour extending patches into the surface of the other, which gives the coat of mail a beautiful marble-like aspect at the sides. Besides the difference of colour, the structure of the Amazonian alligator is unlike that of the Western Ecuador species, especially in the formation of the head and jaws. The main feature of the *jacaré*, as it is called in Brazil, is that the upper jaw entirely overlaps the under jaw; whereas in the other the under jaw exceeds the upper; the snout is altogether narrower, and two of the front teeth pass completely through holes in the upper jaw, exposing their points above, besides other considerable differences in the comparative size and arrangement of some of the other teeth.

In Lagarto Cocha we killed a number of these reptiles; and securing one of them, when wounded by a ball, with a whale harpoon, dragged him on shore, despatched him with an axe and cut off his head, much to the disgust of the Indian to whom the head was given in charge to be boiled down every night when we halted until the skull remained clean and white.

From what I have seen of it, I judge this species to be a generally more dangerous animal than the western one. The latter, however, when what the natives call "*cebado*" (rabid), in which state his appetite appears insatiable, is probably more to be feared, and commits serious depredations. It is to be wondered, though, in places like some portions of the Guayaquil river, where the water literally teems with alligators and at mid-day the banks may be seen guarded here and there by long lines of these huge reptiles side by side, that more damage is not done by them. In certain quiet creeks of the Guayas they may be seen in the water and on the flat mud banks in shoals, in which I have rapidly counted and estimated over 500 individuals, for the most part ten to twelve feet in length. They are sometimes so densely packed together that they have to scramble over one another in the water to move about, like tadpoles in a puddle. Fortunately in general they are probably moderate eaters, and amongst over a score which I have examined at different times, only three had any traces of undigested food in their stomachs: two of them had been regaling themselves on fish

and crabs, and one on a fine domestic pig which he had recently crushed in his powerful jaws and swallowed whole. All, however, without exception, held a quantity of smooth, round pebbles in their stomachs.

It may perhaps interest the reader if I here mention a few further facts I have observed about alligators, and which do not seem to be generally known, but are frequently connected with popular misconceptions. It is hardly necessary to repeat the common but foolish idea that a rifle-ball will not penetrate the tough hide of a crocodile; and I can only imagine so erroneous a conception to have arisen partly owing to the animal's tenacity of life, and partly to the fact that he is very often struck by the ball at an obtuse angle on the flat surface of the back or head, which are exposed above water, and in which case the bullet naturally glances off the thickest and toughest of his horny plates. What further serves to elaborate erroneous ideas is that the sportsman is so often convinced that he has struck his mark, on the reptile plunging violently at the shot, when he has really not hit it at all. If struck fairly, an alligator will as surely, at a reasonable distance, be pierced by a rifle-ball as would a deal board; and I have, moreover, more than once thrown a whale harpoon in such a manner as to enter one side of a large alligator and emerge from the other, transfixing him completely. A good whale harpoon, with a heavy shaft, though in all but the

densest substances, has a wonderful penetrating power, probably almost as much at close quarters as a half-spent rifle-ball; since its entire weight is concentrated on a sharp and cutting point of steel.

In the water, an alligator when shot to death, at the first moment he is struck, immediately turns over and floats on his back; but if the shot leaves him only a few seconds of life, he sinks, reappearing on the surface, when decomposition and its concomitant generation of gases in his carcase have set in.

A phenomenon I have only once seen recorded, namely, by Mr. Belt in his interesting work 'The Naturalist in Nicaragua,' is the roaring of an alligator. I have witnessed it, or rather heard it myself on one occasion in the case of a huge beast who appeared to be following a female of his species. He was swimming after her, diving and rebounding up to the surface of the water, in his rapid progression. I was in a small Rob Roy canoe, and remained still and motionless to watch his manœuvres. Immediately he saw the canoe, he changed his direction and came towards it roaring like a bull at each bound above water. I waited quietly, and as he dived the last time close by the canoe, I forced it forward rapidly straight over him and away, as I was unarmed. Curiously enough, not half-an-hour after this episode, an alligator jumped from a steep bank over my canoe, and only just cleared it, as I was distractedly paddling along close under the shore, and inadvertently startled the reptile above me.

But this all occurred on the Guayaquil river, and is digression from the Napo.

Just above Rubio Cocha, on the left bank, we entered a small inner *chicta* or backwater, where we found a track which we followed up on foot about a couple of miles inland, in the hope of seeing something of the tribe of Tutapishcos (Night-birds, bats). These Indians had large plantations in the forest, and there were traces of their having been present shortly before us; but we unfortunately could not come across any of them, though some of them no doubt saw us. In all probability they had observed our approach and had decamped, being of the most timid nature, especially of white men, and living as they do in constant fear also of the Cotos, their neighbours farther down on both sides of the river. The Cotos also frequently pass their existence hiding away to avoid the robbery of their children by white men from the Amazons, whose shameless kidnapping of human beings is not only condoned by the authorities, but is also often taken part in by them. At Guama-urcu, a little lower down the river, we were informed by a Peruvian who had for years past been settled there amongst the Cotos, that three children had just a few days previously been taken away from them by a white man for disposal at Iquitos.

In former times organised "*correrias*," or human hunts, were carried on extensively on the Napo by Amazonian traders. Can it therefore be wondered at

that some of these tribes flee from the sight of strangers, and that those amongst them who have more ingenuity and less fear, take every possible opportunity of revenging themselves upon their enemies? For we cannot expect them to distinguish at a glance between friends and foes who both approach them in the same manner and bear the same appearance.

The Cotos and Tutapishcos are called "Orejones" by some travellers, on account of their stretched ear-lobes; but they do not go by that name on the Napo. I was assured that the two tribes speak quite distinct languages, but I cannot testify to it. Since on the Putumayo, upon an almost corresponding part of the river, north-west of the Yahuas territories and south-east of the Piojés, there are also Orejones who again are sometimes in strife with other Orejones, unknown to any travellers, farther inland from the left bank of the Putumayo, it may reasonably be inferred that this family, if indeed it be one, extends from the Napo to the Putumayo and across both rivers. The only points of analogy I saw between the hordes of the two rivers were the boring of the ear-lobes already mentioned, and their habitual state of total nudity. Having only heard the language spoken by those on the Putumayo, I had no opportunity for its comparison.

After Rubio Cocha we passed Cayaposa, on the left bank, the accepted boundary on the Napo between Ecuador and Peru, and at the place farther down, already alluded to, called Guama-urcu (Bamboo hill)

we found a Peruvian half-breed living among the Cotos.

One of the women was about the hut, and formed the only specimen of this tribe we saw here. She had the large, pierced ear-lobes, and wore nothing but a narrow band of common sacking round her waist.

CHAPTER XVI.

ON THE AMAZONS.

On the 24th October we reached the Amazons, having spent twenty-five days in descending the Napo from Aguano to its mouth on the left bank of the Marañon, some 2300 miles from the sea. Below the Coca there had been but little change in the scenery along the river-banks beyond the endless variety of the forest vegetation. The bed of the Napo is for the most part very broad; and the lower half of it, when not at high flood, is full of large white sandbanks both in midstream and also here and there along the main banks. There had been no absolute danger in the navigation when we passed down, though during the floods of a big "*reventazon*" no ordinary canoe could live on the current of the upper portion of the river.

We had passed two places where the entire broad channel was full of huge trees and snags sticking out of the water in every direction, and through which the greatest dexterity of the Indians was required to pilot us in safety. The current rushed through these dangerous

obstacles with great force, and at one spot the channel bristled with them so densely packed together, and the stream was so strong, that we were obliged with great difficulty to run the canoes ashore and let them float down gradually close along the bank, checking their progression by means of a rope.

The first part of our navigation up the Marañon was up a huge "*chicta*," or arm of the river, which receives the waters of the Napo; and when night came on, we were at a complete loss to know where to stop and encamp. The forest is always damp and the high banks dangerous for the canoes; whilst the sandbanks had but small patches uncovered which were too near the level of the water. At length we settled on three or four little banks just raised above the water and so small that there was not room for half of us on any one of them.

We were unable to get firewood with which to cook our food, so we went to bed hungry, as darkness had already overtaken us before we had been able to settle comfortably for the night.

In the night we were disturbed somewhat by the rushing of the water, and by two o'clock in the morning found that we were completely surrounded by that element, which had taken the place of *terra firma* under our beds. There was no remedy but to get hastily out of bed into the river, and to embark ourselves and our chattels as best we could into the canoes.

After this experience, our next two nights were

spent on the main bank in the woods, and on the fourth day we arrived at Iquitos, where we spent a week, having been over four months and a half on the journey from Guayaquil. It was a novel sensation to find ourselves in a civilised place again and dining at a restaurant. Our clothes were nearly all in rags and rotten from the constant wet; boots it was not only agony but an impossibility to get on our feet; and I finally found myself compelled to slit mine with a knife from the toe to the instep. We had not tasted wine or spirits for so long that in the excitement of pleasurable anticipation before arriving we had deliberately made up our minds to "exceed" at Iquitos, a preconcerted plan which, to our eternal honour be it recorded, after all was not carried out when dinner-time came.

The Záparos disappointed us by evincing but little interest in the wonders they saw. We had looked forward with pleasure to watching their impressions and exclamations at the sight of large boats, brick buildings, steamers and machinery of various kinds; but hardly any of these things disturbed their stolid equanimity. We took them into the Government workshops, and there the only machine that attracted their special attention was a band-saw. Wood-cutting is with them an operation of such labour and difficulty that they could not understand how a narrow ribbon could cut up boards into so many shapes and curves at will, with such facility. Although with tribes like the Záparos a board has to be hewn with a bad axe, or

wedges, out of a solid trunk, they did not seem to appreciate sufficiently the rapid and perfect action of the various descriptions of large timber saws.

They gave us a surprise, though, but where we had not so readily looked for it. They were much interested in and expressed unbounded admiration for cows and oxen; and when one day I rode up to them on a horse, kindly lent to me by the British Consul, their excitement was uncontrollable. It had not especially occurred to us that these hunters, who knew all the animals of the forest and were so well acquainted with their habits and haunts, had never seen a horse or a cow. But they now saw approaching them a huge beast, far larger even than a tapir, with me seated on his back whilst he tossed about his head and curvetted and pranced hither and thither. They were not exactly really frightened, probably as they saw I was there, though they fled into the house and shut the door, but they could not resist again peeping out of it and through the windows in the greatest excitement I had yet beheld them.

When our stay at Iquitos came to an end, I left downwards for Pará, whilst my friend and companion, Mr. Sarkady, set out to explore the Ucayali. On the voyage to Tonantins, the first station of any note below the mouth of the Putumayo, I met a Mr. Reyes, who was organising an expedition to proceed up that river, which is known in Brazil under the name of Içá. The temptation of joining an exploration of one

of the hitherto least known of the tributaries of the Amazons was too great for me. I succumbed; and agreed, at Mr. Reyes' pressing invitation, to accompany his party.

We therefore left the downward steamer at Tonantins, whence, after waiting about a fortnight, I started in command of the pioneer expedition, on board a Brazilian gun launch, lent by the Government, who were much interested in and desired to support the enterprise of proving the navigability of the river. Mr. Reyes was to follow in a larger steamer he had purchased, and which drew less water than the launch did. The chief objects committed to my care were to ascertain the navigability of the channels and to prepare fuel and information for the larger steamer.

Our stay at Tonantins was very interesting, and the inhabitants were most hospitable. It was just the season for collecting turtles' eggs, and the whole village, with the exception of some half-dozen individuals, left us to go and spend their annual holiday on the *praya* (sandbank), to dig out turtles' eggs and extract the oil from them.

The migration was to a single large bank in the main river, here called the Solimoens. The river bears that name between Manaós and Tabatinga, the Peruvian frontier. Below Manaós it is called the Amazonas, and above Tabatinga the Marañon.

In the Brazilian territories the turtles are protected, the large banks strictly watched during the laying season, and due notice is given to the inhabitants of the

villages as to when they may commence to take the eggs for the manufacture of turtle oil. Capture of the animals themselves by turning is strictly prohibited in Brazil, as it disturbs them on the banks and greatly interferes with their procreation; much more so even than the wholesale extraction of the eggs. The turtle may only be taken in the water by means of harpoon, or bow and arrow.

In Peru and Ecuador there are no regulations of this description; and the natural consequence is that turtles are captured in the most wholesale manner, just before they lay their eggs, in fact when they are on the banks for that very purpose, so that even a smaller number escape the marauder than if the eggs alone were afterwards dug out of the sand, in which case some—indeed myriads—always escape detection and are hatched.

Then again, when a bank chosen by the animals for the deposition of their ova is in any way intruded upon or disturbed, they entirely desert it, and frequently, of necessity, get rid of the eggs in spots quite unfavourable to their safety and incubation. This system, or be it rather called want of system, has a further double effect in checking increase. The little turtles when issuing from the ova, before reaching the water, are, during their first journey upon the sandy desert to the river's edge, preyed upon and devoured from all sides—on the sandbanks by large birds and other animals, and in the water by alligators and the numerous voracious fishes

who are lying in wait for them with open jaws. So, in reality, only a small portion even of the duly developed amphibia ever reach a mature and full growth. Now, if the adult individuals of the species, who have survived these numerous attacks and impediments during their various stages towards maturity, are also captured and molested in a wholesale manner, just when about to consummate the final steps necessary for the procreation of their species, we cannot be surprised to find their numbers diminish very considerably. And in effect, in the territories to which I allude, they are said to be much less abundant of late years. Fortunately there are, in these thinly populated regions, so many out-of-the-way nooks a little farther from the centres of consumption, that in such spots the persecuted amphibian can insure the multiplication of his species without more than ordinary hindrances.

Notwithstanding the war waged against them by men, quadrupeds,—even the jaguar, as I am assured—birds, reptiles and fishes, such an abundance of turtle remains that its numbers, both in eggs and animals, cause astonishment.

To give an idea of these numbers in the protected Brazilian territories, and at the same time to illustrate indirectly the size of the sandbanks in the Solimoens I may mention here that the small village of Tonantins procures from a single bank, whither, as already said, all the inhabitants migrate for a couple of weeks or so at the prescribed season (determined as the rising waters

of November may permit the work upon the *praya*), from 2000 to 3000 tins of twenty litres each, that is to say 40,000 to 60,000 litres of oil.

It is needless to explain that an egg contains very little oil, and of this little a large proportion is wasted under the primitive mode of its extraction, namely, by treading the eggs in troughs formed by canoes, thus separating the oil which rises to the surface. It will, I think, be a moderate estimate to say that for a litre of pure oil some 200 eggs would be required under the present system. This would give an average destruction of 10,000,000 eggs annually on a single sandbank; and very intelligent persons, who have practised the operation for years, have assured me that not one half of the eggs on the *praya* are really disturbed at all, as must indeed be the case seeing the large numbers of turtle that always still remain.

Out of Brazil, the habitual method of turning turtle is as follows. When a bank is found, round about which numerous turtle are observed swimming and reconnoitring in the daytime, the turtle-hunter immediately retires from the spot; for should he disturb the reptiles in any way, or place foot upon the *praya* they have chosen, he may seek them in vain later on. Between eleven and twelve o'clock at night he returns and finds a number of turtle high up on the bank depositing and burying their eggs, and he then turns on their backs as many as he can secure before they in their sluggish gait can reach the water. He must only take care not to put

his hand within reach of their powerful, snapping jaws, for a finger or a piece of flesh will otherwise be severed as by a pair of iron shears.

I was rather surprised to find that the inhabitants of Tonantins, amongst whom were several pure Portuguese, did not eat beef, nor did they care for milk. Their food consists almost entirely of turtle, *pirarucu*, (a fish, dried like cod or haddock), and *farinha*, a very coarse flour made of the poisonous mandioca, which is cultivated in the neighbourhood of all the villages on the Solimoens.

The river Tonantins is one of the black-water tributaries of the Amazons, like the Rio Negro and others. The water is always perfectly clear but very dark, similar to the *cochas* or lagunes, one of which I have described on the Napo.

The evening before the Putumayo expedition started, there was a grand dinner, at which numerous toasts were proposed, chiefly for the success of the enterprise and for the expression of goodwill and compliments to Mr. Reyes and myself.

CHAPTER XVII.

VOYAGE UP THE PUTUMAYO OR IÇA.

My crew was of a heterogeneous description and consisted of a Brazilian engineer, two mulatto firemen, five negro sailors, besides two Colombian traders and ten Piojé Indians who knew something of the river and were to do the wood-cutting for fuel. Eight of the Indians had been sent on ahead in a canoe, some days previously, with Gabriel, one of the traders, to prepare wood at the frontier.

We first stopped at Santo Antonio, near the mouth of the Iça, to buy some fowls and turtle, and towards dusk arrived inside the river, and anchored in five-fathom water near the bank, the stream being very deep right across.

The mouth of the Putumayo, when approaching it upstream from the Solimoens, has the appearance of being a more important branch than the main river itself, which just at this point makes a sharp southerly curve and hides its own course, whilst that of the Iça is exposed wide open to the sight.

Our landing at Santo Antonio, to my regret, and so early in the voyage, revealed to me the weakness of my head assistant, Fernando, one of the traders, who was an experienced woodsman and had spent many years on the Lower Napo, Aguarico, and Putumayo rivers, whereby he had acquired an intimate acquaintance with many of the Indian tribes, and spoke the Quíchua and Jeral languages besides a few words of Piojé. His short landing had afforded him the opportunity, which he could not resist, of some friendly potations, so that he returned on board in a state of jollity and carelessness incompatible with the efficient discharge of his duties.

Beyond a heavy thunderstorm, nothing of special interest occurred until we reached the Brazilian frontier station, 180 miles from Tonantins. The effects of the storm were noteworthy, however. The wind was very high, almost endangering the safety of the launch; and the following morning, as we steamed up the river, we observed in several places large tracks cut like roads through the forest, where every tree had been smashed and crushed down by the force of the gale.

On the right bank we had passed the territories inhabited by Yáhuas and Ticunas, and on the left bank those of the remnants of the ill-fated tribes of Yurís and Pasés, already described by travellers.

The frontier station was in charge of a Brazilian officer, Comandante Antonio Olimpo da Silveira, a hero of the Paraguayan war, who received me most hospitably.

The locality is excessively unhealthy, as, indeed, is notoriously the whole river; and the soldiers, including their commander, were all, I believe without exception, suffering from fever. Every morning they had a kind of medical or therapeutic parade and were drawn up in line to hold out their hands for quinine pills. They looked very pale and ill, an aspect of wretchedness which was enhanced by their having neck and hands bound up for protection against the Pium flies.

Extreme unhealthiness and Pium flies are the scourge of the whole river. Everyone who had been only up to the frontier stations, had suffered from a bad type of fever, and at Iquitos I was informed that all of those who accompanied the Peruvian expedition there some time previously to demarcate the boundary with Brazil, had either died, or undergone severe illness for a long time afterwards. The Pium flies are simply maddening. From the moment the sun rises these bloodthirsty little insects begin their irritating work, and attack one on the neck, face, hands and wrists, drawing blood the moment they settle. There is no eluding them, and they finally, even on the Indian's tough hide, sometimes engender such excessive irritation by the constancy of their attacks, that neck and wrists are wrought into painful confluent sores. The only consolation is that mosquitoes cannot make a livelihood where the Pium fly exists in large numbers, and as the latter withdraws to rest at sundown one is tolerably free from molestation during the night.

There was an abundance also of another insect, common all over the equatorial lowlands, which irritates some persons even more, if it were possible, than the Pium fly, and that is a microscopic harvest bug, one of the species commonly known in certain places as the "red tick." The little animal is red and almost invisible to the naked eye; but he climbs up one's legs and all over the body and buries himself in the epidermis, setting up, in thin-skinned persons like myself, such intense irritation for about three days that I have been driven almost to the verge of madness by it. Notwithstanding every effort of self-control to bear the itching sensation, I have many times awoke in the night to find myself sitting up in bed and literally tearing the skin off my legs, where most of the insects collect, with my nails; and no remedy that I have ever tried has had any effect in allaying the itching when once the little tick has established himself and the affection is running its course. He lives in the leaves and vegetation of the forest, especially where they are a little drier than elsewhere.

Having remained two days at the frontier to cut and take in a fresh stock of fuel, we proceeded on the voyage, and, after one or two stoppages to execute slight repairs upon the machinery, reached the Peruvian frontier with Colombia, a spot called San Cristobal, where some Ticuna Indians and a Peruvian half-caste resided.

On the left bank we had passed a lagune called

Avelino Cocha, named after a man who, we were told by the Indians, had had one of his legs seized by an alligator, from whose formidable jaws, however, he had freed himself with the loss of the limb. But, as far as I recollect the story, he died from the wound.

On the right bank we next passed the Yáhuas river up which eleven days' canoeing would place the traveller one-and-half-days' foot journey from Pebas, on the Marañon.

The river had been in flood during the first part of our voyage, and there was plenty of water for us to pass over the banks and out of the strongest current; but the flood was now rapidly declining, and by the time we reached Pohona Cocha, seven days after leaving the Brazilian frontier, the water had fallen fully five feet, and I found the short cuts we had been taking across the banks impracticable any more. This was confirmed by our grounding on the lower portion of a bank, and I therefore was obliged henceforward to follow more in the main channel of the river against a stronger current, keeping clear of the banks where the water was slacker but now too shallow.

We passed the Garaparana (canoe river), which enters the Içа on the left bank, and has much the same appearance of being the main river instead of a tributary, as described with regard to the Içа and the Solimoens. The channel of the main river continued much contracted, and in consequence we had to stem the strongest current until Carapaná (mosquito) was

reached, according to my calculation about 565 miles steaming from Tonantins.

Carapaná, named after an Indian who had formerly lived there, is a spot where, at the time of my visit, there was a house which had been erected by a German known by the name of Don Cristobal Colon, and who, like his illustrious namesake, had suffered deeply from a proper want of appreciation of his merits on the part of his contemporaries. He had lately been murdered by two of his Indians, and his house had been appropriated by another wandering Indian, whom we found inhabiting it with two wives, and by whom our advent was probably not hailed with joy, since he took his departure very early the next morning.

We remained at Carapaná only two days and a half, and took in a full complement of fuel to last us four days, leaving 3,200 logs stacked on the bank for the steamer which was to come up after us.

From Carapaná upwards we were entirely on our own resources, and I had general instructions to fix three stations at equal distances between this and the first habitation of the semi-civilised Piojés, Consacunti, and to cut and stack at each of them a supply of firewood, clearing the bank so that a steamer might get alongside, and leaving the spot conspicuously marked, so that it should not be passed by unobserved. Now, it was no easy matter to divide a route into equal stages without some knowledge of its length. The Indians knew the river pretty well, but could not give

me any idea of distance precise enough for my purpose, nor were they able to form any reliable opinion as to how long the launch might take from Carapaná to Consacunti. They were only accustomed to plodding along in their canoes, in which they had to cross and recross the river constantly to avoid the current when going up-stream. I therefore experienced great difficulty in eliciting the information necessary for me to settle my plans. I called two of the most intelligent Indians and cross-examined them thus, in the language usually spoken by the Piojés who have come into contact with more civilised people, and which may be called Pidgin-Spanish.

"Ese canoa andando Consacunti cuando será llegando ese Tonantins tiene?" *That canoe going Consacunti, when will be arriving that Tonantins has got?* Reply: "Asi luna será tiene;" *So moon will be has got,** showing one finger or two, or first one and then two, on repetition of the question. From this I was to understand it would take one month or two, which was hardly as precise as could be wished! I would then try: "Ese Consacunti, Carapaná llegando, más léjos será tiene ese Carapaná, Tonantins llegando?" *That Consacunti Carapaná arriving, further will be has got that Carapana Tonantins arriving?* Answer: "Si, más léjos tiene." *Yes, farther has got,* which might refer to either, and upon close examination did refer to either, whichever I liked!

* The translation into English is quite as grammatical as the original Pidgin-Spanish.

Comparisons of long distances were evidently hopeless, so, confining my enquiries to the part of the route on which I required information, I then asked: "Ese Consacunti saliendo luna asi tiene, Carapaná llegando luna donde será tiene?" *That Consacunti leaving, moon so has got, Carapaná arriving moon where will be has got?* The reply to this was a wave of the arm westward, taking in at least forty-five of the heavenly arc, by which I was to understand the position of the moon at sundown; so, pointing my arm steadily with more precision where I thought might be meant, I said: "No será asi tiene?" *Will not be so has got?* And received for reply "*No!*" which, however, it must not be imagined meant "*no!*" but "*yes,*" being a negation of my negative question.

I could not arrive at any useful information in this manner, so at last I had to examine the two men separately, making them tell me each spot or bank they would halt at every night successively on both the upward and downward journeys; then, putting the two accounts together, I arrived at the conclusion that if I found no special objection afterwards, I should fix Orejones, Salado Grande and Incuisilla as the three stations before Consacunti. Fortunately this determination turned out well, and the distances proved equal enough for my purpose.

The water had continued falling steadily, and soon after we left Carapaná some of the places where the channel crossed the bed of the river were only one-and-

a-half fathoms in depth, and large sandbanks began to show themselves. We were therefore obliged to keep very carefully in the deepest channel, which was easy enough so long as the reaches followed regular curves, first one way and then the other, as many of them did. In some of the straight reaches, however, where the entire bed of the river spread out to an immense width, and no specially deep channel existed, navigation was most intricate and difficult.

With great care, and often losing a long time in searching for the deepest passage among the numerous sandbanks, we managed to get along without serious mishap. Some turtles were caught, and a number of their eggs, which formed a welcome addition to our commissariat. After anchoring at night, we also usually fished with some success.

On the evening of the third day from Carapaná we anchored in deep water near a sandbank, where we found a man called Firmin and a number of people, amongst whom the Indians informed us was a Piojé Indian who had formerly been working with Avelino, the man who had his leg bitten off by an alligator, and a boy who had been with Mr. Christopher Columbus, also before mentioned, and who was said to have assisted in his murder, a story, however, which I saw no reason to believe, though the boy was at Carapaná when the murder took place.

In any case, Firmin had no right to detain either of them, and Mr. Reyes and the Colombian authorities

were particularly anxious to restore to their homes all the Piojés about in Brazilian territory and down the river, where they were undergoing practical slavery under unscrupulous masters.

I therefore sent for the Piojé and the boy; but a message was returned to me that Firmin was away in the woods with them both. An evasion like that, however, did not serve him, for, in response, I seized his canoe, and after making it fast alongside, told his messenger to inform him, that unless he sent me the two persons I demanded, at once, I would take Firmin himself back to Brazil. As he was a Brazilian deserter, the threat told, and the Piojé and the boy were sent on board, so that we were enabled to continue our voyage to the place where the Orejones lived, and where wood-cutting was again resumed. This operation generally occupied four days at each station, and may here be described. We usually cut about 1,100 to 1,200 split logs for the launch, and left from 3,000 to 3,500 stacked for the larger steamer. The first step was to find a "*loma*" or hillock, which are few and far between, for it is only in the old forest on high ground that hard woods are plentiful, with the exception of one wood in certain places, "Palo Mulato," or "Capirona," which is very hard, although it grows in low places in newer portions of the forest. Soft woods are naturally of little use for steaming purposes, whilst the hard ones burn almost as well as coal, and can be used green.

The next essential was the choice of a spot which

could be approached at low water, and where a steamer could make fast to shore. Getting alongside, in the thick vegetation, was always attended with considerable discomfort, and the moment a rope was made fast, all hands, Indians and negroes, brought their *machétes* and knives into hasty requisition, to remove the overhanging and penetrating branches of the trees, which were invariably loaded with ants, frequently of a vicious and warlike nature.

As soon as the day began to break, the Indians, after drinking their "yoco," began to make the forest resound with the heavy blows of their sharp, narrow-bladed axes on the hard wood, and in a quarter-of-an-hour's time the tremendous crashing of the trees might be heard in different directions as they fell to the ground, tearing and splitting all within reach that withstood the weight of their fall. Sometimes, though, a tree would be bound so firmly by strong lianas, twisted together even and massive as heavy cables, from its boughs and the upper part of the trunk, that it would not fall in any direction, but remain suspended in the air when one or two logs had been cut off its length below. Up till nearly mid-day trees were felled and the trunks cut up into lengths of three to three-and-a-half feet, and then breakfast, consisting of either turtle, fish, tapir, pirarucu or turtles' eggs, whichever was at hand, with farinha, was demolished, and work resumed without loss of time. The logs were next carried to the bank, split into convenient sizes, and

stacked close up to the water's edge. The first day was passed in supplying sufficient to the launch to last for about four days' steaming, and the remaining three days were dedicated to the preparation of a stock for the *Ucayali*.

All being ready in a suitable position, the bank had to be cleared so that the stack might not be passed unobserved from the river. All the outer bush was razed to the ground, and the large overhanging trees felled into the water. Sometimes these would remain attached by lianas to other high trees, and much difficulty was experienced in severing them. The Indians would jump into the water, and, getting on to the half-sunken trunks of the branches, free them one by one until the current carried them away, when the men would swim ashore leaving the port clear. The amount of hard work these Indians performed was truly marvellous, and confirmed me in what I had always observed, that for endurance their race is unequalled. In the water they were untiring, and swam and dived for hours together; whilst in wood-cutting, especially where this is hard, and none but strong blows which made the axe ring like a bell were of any avail, their execution always excited my astonishment and admiration. There were some days on which this work was carried on twelve hours without rest or food so that the job might be finished; for I made them understand that a certain quantity of wood was required, which once completed, the journey would always be resumed without loss of

time; and as they were well-treated, and were all very anxious to reach their homes, they worked with a hearty good-will. In the afternoons, when energies were inclined to give in, I generally sat looking on, dispensing mild jokes suited to their understanding, and animating them to get the day's work done, to which they would gleefully respond, and with laughter and real Indian whoops and shrieks, of which the laughter mostly consisted, the tough logs were split with an enthusiasm bordering on fury.

The Piojés are, like most Indians, usually taciturn and laconic with strangers, especially white men, but amongst themselves often chatty and merry; and if one has their confidence, they are easily amused with one's conversation as long as they can understand the drift of it. I would, for instance, merely say to one of them sarcastically: "Tuyo no sabiendo leña cortando," *You don't know how to cut firewood!* or "Tuyo chacra cortando no sabiendo tiene, mujer no será cojiendo," *If you do not know how to clear the forest for a plantation, you will not get a wife* (this being the necessary matrimonial accomplishment), for them all to roar and shriek with laughter, and to feel themselves reanimated to more strenuous efforts at their work. They always seemed to understand jocular sarcasm, and would continue exchanging with each other, to me incomprehensible, witticisms after such a remark of mine as: "Tuyo tabaco fumando no queriendo tiene," *You would not like to smoke a cigar!*

I have often thought since how desirable it would be if one could always meet with such happy, diligent and untiring labourers.

Many of the woods we used for fuel were very beautiful, and one especially, called *Palo de Bodoquera,* it seemed a pity to burn. It is used for the manufacture of *bodoqueras,* or blowguns, which require a very straight and fine grain. The trunk reaches fifty to sixty feet in height without a branch or a knot. The heart is a very dark mahogany colour and the outer wood quite white, so that when split longitudinally into segments, each log had the appearance of being composed of two quite different woods joined together with geometrical precision, so straight were the lines and so abruptly defined the two strongly contrasting colours.

Every morning on board the launch I used to get up before sunrise, just as dawn was breaking, go forward to the bow and jump overboard, swim about for a few moments in the strong current, and then climb up again out of the water by means of a rope hanging over the stern.

Bathing in the river can only be performed in safety where the current is fairly strong, since the slack and shallow water nearly always abounds in *Skait, Piranha,* and *Caneiro,* three species of highly dangerous fish. When wading in still water, the Indians invariably keep prodding and beating it with sticks to drive the fish away. The piranha is a most formidable customer, and attacks anything; whilst his colleague, the caneiro, though of a

quite different type, is not behind him in voracity. The former has very sharp teeth set together like a saw, and so hard are they that the Indians use a piece of the jaw with the teeth in it to saw across their darts with. The caneiro, on the other hand, does not bite, but he fixes his protuberant mouth like a sucker upon the object of his attack, gives a violent wrench with his whole body, and thus tears off pieces of the skin and flesh of his victim.

On one occasion when we had anchored for the night near the shore, I put out about a dozen large turtle into the river to refresh themselves from the heat of the steamer, having previously secured them by means of lines fastened through small holes at the edge of their carapaces. When morning came and they were hauled in again, to my surprise and disappointment, all but two or three were empty shells, as clean as if they had been carefully scraped out. They had simply been devoured by piranha and caneiro, and although the lines were long enough to allow the turtle a fair amount of play in the water, the fact of their having been hampered at all in their movements, or perhaps having got entangled together, had prevented their efficiently protecting themselves when attacked.

CHAPTER XVIII.

THE PUTUMAYO—*continued.*

THE Orejon Indians, at whose place we had arrived, had two or three large huts close to our anchorage. The tribe, as I have already stated, probably forms part of one family with the Orejones (Cotos and Tutapischos) of the Napo. On the Putumayo they inhabit approximately the territories from Yayocuru below the Tohalla Grande river, down to Toquilla Urccu and Yacaré Cocha.

As their name implies, they have large ears, the lobes of which are bored and stretched until a small block of wood up to an inch and a half in diameter can be inserted. The men are small, emaciated and phthisical; the women are very short, but almost all those I saw were stout, and, to all appearance, healthier and stronger than the men. The Orejon language is agreeable to the ear, and its sounds are easily caught and repeated with precision, unlike the Piojé and Záparo tongues. The women we saw were very talkative and merry, showing no particular shyness nor excessive curiosity

as they received us in their indoor costume, consisting solely of a mussel-shell attached to a string of small beads.

Their houses are practical, and differ from those of other tribes. They are constructed as if all roof, thatched down to the ground, and look like big hay-stacks, with a door at each end of similar material to the rest and swinging from above, so that when one has lifted it and passed in or out, it immediately falls back into its place and remains closed. There are no windows, so inside all is quite dark until the eyes get accustomed to the change from the strong sunlight outside to a space where all light is excluded but a slight glimmering between the interstices of the thatch; after a short time the pupils dilate, and the interior becomes gradually perfectly distinguishable. This state of semi-obscurity is maintained to keep out the Pium flies which exist in indescribable numbers and of unsurpassed voracity.

It is curious, and would seem to add to the testimony that some insects can hear or appreciate sound, how these flies are attracted by noise. I frequently observed that if I went into the forest quietly, even only a short distance from the river-bank where they swarmed, I remained unmolested by them, but only so long as I made no sound. As soon as conversation or wood-cutting began, the flies would also begin to make their appearance, and as the noise continued, they soon became as plentiful as elsewhere.

The next station which I had fixed, the River Salado Grande, was reached, and I calculated it to be about 130 miles from the Orejones. Its name is no doubt derived from the proximity somewhere of a "salado," or saltlick, where all the animals of the forest congregate to lick up the brackish water with which the soil is impregnated, or which oozes from the ground in springs. In other localities I visited two such saltlicks, and it was a sight to behold to see the endless tracks of animals which must frequent such spots at certain times. Round one of the "salados" I went to, the whole soil of the forest was churned into deep mire for a space nearly a mile in diameter; the undergrowth was entirely eradicated, many of the smaller trees torn down and trodden under foot, and the roots of the large trees to a great extent laid bare, whilst the whole ground bore the appearance of having been overrun by dense herds of peccari, tapir, deer, jaguar, and other smaller animals.

After four days' stay at the Salado river, where we took in our usual supply of wood for fuel and left a stock for the larger steamer, we tied a letter, enveloped in large waterproof leaves, to a cross, giving an account of the journey and the channels of the river, and set out again up-stream.

On the third day, farther up, we passed another Salado, where I had the good fortune to shoot a tapir. She escaped into the river wounded; but she soon rose again, and tried to attack our small canoe, from which,

however, we harpooned her, and finally got her on board the launch. She was old and very heavy, and the flesh did not prove to be very palatable when cooked, though young tapir in good condition is very good eating.

Navigation continued difficult and intricate, as the river was very low—indeed, the Indians all said they had seldom seen so little water in it; but we got along fairly well till Christmas Eve, and then, and throughout the festive season, our troubles commenced and continued. To make matters worse, I had fallen ill with a very bad fever and a violent liver attack, which prostrated me for over a week. I could neither sleep nor eat for five days and nights, till I was compelled to take large doses of laudanum to ensure short snatches of repose; for, with the noise of the engine, the inefficiency of every one on board to pilot the vessel properly, and the rascality and menacing conduct of the negroes, I found it quite impossible to rest, either standing, sitting, or lying, in any of which positions my bones were so sore that I could hardly support existence.

Fortunately at length a turn came, and I was able again to resume my usual post all day on the look-out at the bow of the launch. Fernando, I record with gratitude, was most kind and attentive to me during my prostration, and no nurse could have been more solicitous for my recovery, nor more gentle and untiring in his attentions. As soon as convalescence set in, he landed every morning in the forest and shot me a

couple of partridges, which were the only food I could at first bring myself to taste.

Forty miles below Incuisilla, during the night, our anchor dragged a little, and in the morning refused to be weighed, having doubtless caught in a large snag. Every expedient was devised to free it, and ropes were severed and strong blocks broken in the attempt. A high pressure of steam could not loosen it in any direction, so the entire day was passed in hard but futile labour. Early the next morning I sent a few hands into the woods to procure a large log of light "*balsa*" wood, so as to cut the chain, buoy it, and abandon our emblem of hope—a resolution I arrived at most unwillingly, for it might cost us dear, and perhaps result in the failure of the expedition. However, to stay was equally bad. The last effort had been made, and no sign of ceding was visible, so the chain was about to be severed; but a farewell struggle was proposed—steam got up to double the usual working pressure, all the chain paid out, and the launch turned ahead at full speed, to see if something would not give way. Something did; but happily it was the snag, and we found ourselves once more released.

The usual wood-cutting was done at Incuisilla, where I was obliged to prolong the stay to five days on account of the engineer's getting an attack of fever. Simon, one of my best Indians, had also cut one of his toes nearly off with his axe, which disabled him temporarily from further work.

The river was very dry and the channel more and more complicated, with sometimes only 1¼ to 1½ fathom of depth, and on the first three days of the New Year troubles set in again. The water had become so low and the bed of the river often so much extended that in several places a passage seemed impossible.

The first two days we got stranded for four or five hours each day, and had to labour hard to get off, effecting a passage ultimately on each occasion through a complicated channel of one fathom of water, the deepest anywhere to be found. On the morning of the third day, 17 or 18 miles above the Semeri, in crossing a broad shoal which extended across the entire river, it was impossible to avoid running aground; and in backing off, the current seized the launch, and swung her, side-on, to a high portion of the shoal, seating her firmly on the sand, which immediately accumulated largely under her lee.

We got a rope made fast to the shore and worked unceasingly till dark, discharging all the wood, &c., but night came on and found us still stranded, though nearer to deep water than before. I let go the anchor and paid out plenty of slack chain, in case we should drift off in the night, as I hoped we might, the length of the chain being calculated to allow us to reach the deeper water near at hand. Fortunately my surmise, based on the continual shifting of the surface sand in which we were embedded, proved correct, for early the

next morning the current had accomplished its work and we swung free.

The river was then explored with a boat, and nó outlet being attainable, at last a very narrow and unpromising arm was sounded and found to contain a narrow channel with two fathoms of water in its entire length, until it rejoined the main river.

As the anchor lay far above us in shallow water, it was got in suspended to the boat, and the arm or backwater, which I christened "Hondo Brazuelo," passed in safety. Several similar incidents of grounding badly occurred, till at length the water began to rise again, and we met a strong freshet, which did not come unexpected, as heavy rain appeared to have fallen to the westward for the past three days; and by the time the Cocáya river was reached on the evening of the same day on which the water first showed signs of increase, it had risen eight or nine feet and was running with great force.

Eleven hours' steaming from the Cocáya brought us to Consacunti, the first settlement of the semi-Christianised Macaguáje Indians, or Piojés of the Putumayo, about 900 miles from Santo Antonio on the Solimoens. The same quantity of wood was cut here and at Montepa, the next settlement, about 100 miles farther up, as at the other stations below, and at last we arrived at Yasotoaró, where the Prefect of Mocoa, the Corregidor of the Putumayo, and others, had been awaiting our arrival for months past.

The entire voyage from Tonantins had occupied fifty-seven days, out of which we were actually steaming 372 hours.

I spent twelve days at Yasotoaró, which is a small Indian village on the banks of the river, and at the expiration of that time, as the steamer *Ucayali* had not arrived, I started again on the downward trip about two days behind a heavy freshet, which I intended to overtake and keep close behind me in case of grounding.

Before leaving Yasotoaró, which is synonymous with Tabatinga and Pucabarranca (red bluff) in other parts, I gave two boys I had become possessed of to Fernando, who at Montepa had been very drunk indeed, so much so that he began breaking crockery and such-like things on board the launch. I threatened to put him in the river unless he moderated his violence, and I tied a rope round him for the purpose; but, fearing the strength of the current, I got assistance, laid him on the deck, and whenever he opened his mouth to utter a sound, a pail of cold water was dashed into his face. This, after a short time, brought him back to his senses; but he was furious that an engineer or sailor should have assisted in suppressing his uproariousness: he did not mind my exercising my authority upon him direct in any way I thought fit. Notwithstanding this weakness, I knew the two boys would be better off with him than with anyone else, and that he would treat them kindly. One of them was the boy I had taken from Firmin, the

deserter, and who had been with the murdered Christopher Colombus; whilst the other was obtained from the Orejones and was given to me as a present. He belonged to a tribe of Indians called Monrois who dwelt somewhere far away from the river, and with whom the Orejones have some transactions of barter. The boy was very small, probably about seven years old, and the language he spoke was not known to any of us, whites or Indians. He was christened by the "Corregidor" at Yasotoaró Poncio Pilato, and the only two words of Spanish we could get him to understand were "*candela*" (fire) and "*agua*" (water). Even this extensive vocabulary rather confused him, although he seemed a sharp, merry boy; for if, reversing our usual custom on rising early in the morning, I happened to call for "*candela,*" he would bring water for me to wash with; whilst, later in the day, if I said "*agua,*" he would bring fire to light my pipe.

The downward voyage was completed in fourteen days, including various stoppages from grounding, twice rather badly, the *Ucayali* steamer having been met about a day's journey below Consacunti.

The depth of the Putumayo I had found to be very variable. Near the mouth it is very deep, though at the time the Solimoens was beginning to rise, but had not nearly attained its highest level. The formation of the sandbanks in the river merits some description.

From their upper end they invariably rise gradually and almost imperceptibly, but at their lower end mostly

fall quite abruptly into deep water, so that in ascending the stream, excepting in very shallow and generally complicated places, with due care, there was little danger of stranding badly. Indications of shallow water could always be detected on the surface by close observation, so that when these were discerned, careful soundings and a reduced speed enabled us, in case of meeting an impassable barrier, to back off without much difficulty. This I always found to be the case, and by unceasing attention managed, after the first experience, never again to strike unprepared or at high speed.

Steaming down with the current, all this is different. It was far easier to get on a bank without knowing it until retreat was impossible, and often without even being able to see any sign of the gradually shallowing water one was running into, until all at once the tell-tale line on the surface, showing the more elevated portion of the bank, was discerned crossing the bow. Here to slacken speed would be useless; to turn tail would require more time than the sweeping current would allow, and when stranded, to get off up-stream against the whole force of the tide would be impossible; so nothing could be done but to go on at full speed, and force the bank as far as possible, then seek the nearest point of deep water, and continue to force a passage with the aid of an anchor thrown out some distance ahead in the required direction, to haul upon, and a continual disturbance of the sand around the launch's keel and bottom. In this manner, with the aid of the

friendly current washing away the loosened sand, we got safely over banks on two occasions on the downward journey: once after unceasing labours during more than a day, with all the crew working in the water.

At its sources the Putumayo consists of two principal head-waters—the Putumayo itself, and, of equal importance, the Guamués, to the southward. Following the mountain-range still a little farther south, we find the San Miguel river, more entitled to the name of a head-river than a tributary, since its source is equally elevated and as far west as the others; and besides, it contributes a volume of water almost as great as the main stream at their confluence.

The Putumayo runs a general south-easterly course, almost parallel to the Japurá and Napo, over a bed of shingle and rock, with high banks at first. As we proceed downwards, the banks become lower, excepting where an occasional hillock is bisected; and in many places the river opens out to an enormous width, forming several channels, separated by large islands and sand, or mud-banks, the shingle always becoming finer and scarcer until at Montepa, about 900 miles from the Solimoens, the last stones may be seen. Hence downward all is sand and fine mud; and for almost 3,000 miles to the sea not a pebble is to be found along the banks, excepting perhaps an occasional one sticking to a piece of driftwood, which, when found, is preserved as a curiosity. All the distances I have mentioned on the

river refer to its navigable channel, and not to straight lines. They cannot pretend to precision, having been calculated from the speed of the launch.

The average current I take to be about three to three and a half miles an hour; but this varies much according to its set, the width of the bed, and other causes. It runs with much more force through some of the narrows. It is also greatly influenced above by the heavy rains and thaws on the mountains, and near the mouth flows pretty freely, or is repressed, according to the height of the Solimoens.

The course is extremely tortuous, straight reaches are few, and a water horizon is very seldom to be seen.

Sometimes the bed is so extended as to give the river the appearance of a large lake; at others, with low water and between close banks, no exit is apparent until, perhaps, a narrow one is actually touched upon between a steep shore and a low sandbank. And again, at a few points, the water is compressed into one deep channel, walled in by a worn hillside against which the current has set. A considerable portion of the stream winds regularly in snake-like curves, the lateral reaches of which are often longer than those in a line with the general course of the river.

The existing maps, from which mine is taken, with alterations, are made up quite independently of surveys, and, excepting the higher and lower portions of the river, are mere sketch-work, especially the tributaries, most of which are quite unknown. Important ones are entirely

left out, and insignificant ones prominently portrayed. Villavicencio, however, in his map of Ecuador, though very incorrect as regards the eastern side of the Andes, gives a better idea of the course of some of these rivers than other geographers. The regular snake-like form of the Napo and the innumerable lagunes from which all the tributaries spring, drawn like a row of musical notes, though probably delineated only from hearsay and guess-work, give a very fair general idea of the windings of the Putumayo.

All the inner (smaller) curves of the banks rise gradually from a low recent deposit, and their vegetation is of a quite different description from the older forest of the outer (larger) curves. Thus, by the vegetation alone, a former, much straighter course, may be distinctly traced, and generally, at least where the river bends, the deep side is easily recognised, solely by the nature of the forest which borders it.

In some places the strong floods take a direct route over the tongues of low land forming the inner curves, instead of following round the circuitous channel, and thus islands are formed and the bed of the river is spread out, one part of the stream resuming thus its old previous channel. Most of the islands are formed in this way—gradually deposited against the shore by the eddies, and then cut off by the floods, very few being created from their commencement in mid-river independent of an inner bank, and still fewer of them are original, that is to say, of equal date to the main forest.

There is a singular sameness in the appearance of the banks on the entire river, and although naturally the vegetation has the richest variety, as in the whole Amazon valley, this profusion throughout over such vast areas is wearying, and productive of a strong desire that one may meet with a rough, rocky bank, an open plain, a cascade, in fact anything to vary the monotonous flat banks. Nevertheless, I must confess that the endless beauty of the rich vegetation, the immense variety of palms, the graceful bamboo (always the thorny species east of the Andes), the wild plantain, the various ferns, and the innumerable forest trees, all intermingled with and bound together by an infinity of creepers, *lianas* and parasites, were a continual source of admiration and enjoyment.

Before closing here this narrative of my travels in Ecuador and up the Putumayo, I will give in another chapter a very short outline sketch of the history of Ecuador.

CHAPTER XIX.

HISTORICAL SKETCH.

Of the ancient history of Ecuador nothing reliable is known; but the farthest reaching tradition tells us that the country was once inhabited by a race called Quitus, after their last king Quitu.

It was subsequently overrun by the Caras, a people said to have dwelt on the coast of the Pacific, and to have arrived in *balsas* (rafts), from which we might perhaps infer that they proceeded from the Peruvian coast, especially as the language the Peruvian conquerors, centuries afterwards, found spoken in Quitu, where they had never yet penetrated by land, was with little deviation similar to their own tongue.

Over the Caras, or Carans, tradition further informs us that fourteen monarchs reigned under the title of Shyris, and it is only in about the year 1460 that legend commences to merge into history, when during the reign of the fourteenth Shyri, Hualcopo Duchicela, the Inca Tupac Yupanqui, entered upon his wars of

conquest against the coveted kingdom of Quitu. These conquests, after the death of Tupac Yupanqui, were carried on with even more energy by his son Huayna-Capac, the greatest of the Incas, who, at the battle of Hatuntaqui, in 1487, at length completely overthrew the Shyri dynasty.

Cacha Duchicela, the fifteenth Shyri, was killed on the field of battle; but the valiant Caras, instead of capitulating on the death of their chief, at once proclaimed his daughter Pacha their queen, and prepared to continue their resistance against the invaders. Huayna-Capac, finding such unexpected resolution in his adversaries, now betook himself to diplomacy in order to complete the work of aggrandisement so nearly accomplished, and the negociations terminated by his marrying Pacha; so that by amicable, or rather amorous, means he was able to assume the insignia of the Shyris, with the power they represented. So pleased was Huayna-Capac with his new love and his new conquest, that he no more returned to Cuzco, but thenceforward resided in Quitu during the further period of his long reign of thirty-eight years.

According to custom, ever since the time of the first Inca Manco-Capac, who announced himself as the direct child of the sun, the heir-apparent to the imperial throne had always been the eldest son of the Coya, or legitimate queen-consort, who, at least in the later reigns, was herself the eldest sister of the Inca. Had this long-established rule and time-honoured custom of

his fathers been followed simply by Huayna-Capac, how different might not have been the course of subsequent events; for the Spaniards, instead of arriving on the shores of a kingdom divided against itself in civil war, would have found a mighty consolidated empire ready to repulse them!

The heir to the throne of Huayna-Capac, then, was, according to the ancient rule, Huascar alone, the son of the Coya; but Huayna-Capac disregarded this usage of his forefathers, and on his death left the kingdom divided, Cuzco to Huascar, and Quitu to his favourite child Atahualpa, the offspring of his union with his beloved Pacha, the son in whose veins flowed united the blood of both the great Inca and Shyri families.

We shall not attempt to accompany Huascar, the Inca, in his transactions with the Spaniards in Peru; but of the Shyri Atahualpa, or Atabalipa, as he is called by some contemporary historians, we must recall to mind that after a peaceful reign of some four years, harmony between the two half-brothers came to an end, disturbed by whose fault it is difficult now to unravel, and war ensued. The result of the discord and strife of the contending parties for the entire empire was the defeat of Huascar, and his reduction to prison in his own capital. Shortly after this, in 1532, whilst the conquering Shyri-Inca, Atahualpa, was at Cajamarca (or Caxamalca), Pizarro landed at Puná and Tumbez, and after having betrayed the Inca's confidence and

thrown him into prison, slaughtering his unarmed retainers in a brutal manner, the brave, proud monarch, on the most frivolous and iniquitous charges, was condemned to be burnt alive. This sentence, on Atahualpa's abjuring his own religion, was commuted to strangulation; and thus by the death of the lowest malefactor perished the head of one of the most absolute but mild theocratic monarchies in the world, and the last great ruling chief of South American civilisation, a victim to the infamous and vile mercenary lust of desperate adventurers.

Quitu next fell into the hands of Rumiñagui, one of Atahualpa's chiefs who was present during some of the first negociations with the Spaniards in Peru, and had strongly counselled his master not to place confidence in the friendly protestations of Pizarro. This ambitious general, foreseeing the fate that must overtake Atahualpa, proceeded at once to Quitu, and made himself master of the kingdom; but after a brief sway and hard contention with the Spaniards, on their nearer approach to the capital, he slaughtered the virgins of the sun, set fire to the city, and withdrew with all the treasure it contained to the fastnesses of the mountain which still bears his name, depriving his enemies in this way of all he knew they most coveted.

The kingdom of Quitu now (in 1533) came into the power of the Spaniards under Benalcázar; and on the 28th August, 1534, Diego de Almagro, who had come up from Peru to join with Benalcázar in resisting the

usurpations of Alvarado, founded the present cities of Quito and Riobamba.*

The expedition from Guatemala made by Alvarado terminated pacifically, though only on the eve of a battle near Riobamba, and upon receiving from Almagro a sum of money, the invader withdrew, making over his fleet and armament to Pizarro's representative.

In 1540, Gonzalo Pizarro was appointed by his brother governor of the province of Quito and handed in his credentials to the municipality on the 1st of December of that year. In the following year the famous journey to the country of Canela was commenced, on which Orellana, one of Gonzalo's captains, basely abandoned his companions on the Napo and completed his marvellous voyage down the Amazons to Europe. During Gonzalo Pizarro's absence, Vaca de Castro, with a commission from the Supreme Government authorising him to assume the administration in the event of Francisco Pizarro's death, arrived from Popayan.

* All historians who have followed Alcedo and Velasco state that the city of Quito was founded by Benalcázar in 1533; but according to the municipal records still in existence, as cited by Dr. Wolf in his 'Chronicle of the Andes,' both Riobamba—which was then called Santiago de Quito—and the present city of Quito, which was first named "*the city of San Francisco del Quito*," were founded in 1534 by Almagro; the former on the 15th August, and the latter on the 28th of the same month. The present capital was founded from a distance, and, according to the original minute, "in great haste," in order to forestall Alvarado who was fast approaching, and might have claimed priority. Hassaurek, who has also examined the original records of the Cabildo, confirms this.

He was well received at Quito by Pedro Puelles, Gonzalo's lieutenant, and by Benalcázar, so that he was able to continue his march uninterrupted to Peru, where the Marquis Francisco Pizarro had recently been assassinated.

The first Viceroy of Peru, Blasco Nuñez de Vela, sent out from Spain to take over the reins of government, having been compelled to leave Lima, next came up to Quito in 1544, thinking thence to re-establish his lost authority. He was followed by Gonzalo Pizarro, and was compelled to retreat to Popayan. But in 1546, he was drawn to the capital by stratagem, and a battle ensued in which Pizarro was victorious. The Viceroy ended his arbitrary career by decapitation when wounded on the field, to increase the indignity his execution being performed by a negro slave at the order of Puelles, who was present shortly after his fall. In July 1546, Gonzalo Pizarro again returned to Peru, leaving the administration in the hands of Puelles, a man who seems to have always earned the admiration and support of the Spaniards, and who, we are told, was "respected" by the Indians on account of his unscrupulous slaughter of natives on the slightest provocation or even suspicion! *

The good priest La Gasca—of whom Prescott † says, "Pizarro could not discern that under this modest exterior lay a moral power stronger than his own steel-

* 'Hassaurek.'

† 'History of the Conquest of Peru,' p. 385.

clad battalions"—with the object of bringing about the necessary reforms in Peru, left Spain in May 1546, with unlimited authority, but unarmed and almost unattended; and after long delays to allow the justice and loyalty of his cause to work on the minds of the people, and the secession and treason of Pizarro to become more apparent in its true light, gained the completest ascendency over the entire kingdom. Pizarro was beheaded; and La Gasca, having set the affairs of the administration in order, returned to Spain in 1550 to enjoy the merited gratitude of his sovereign and countrymen.

Quito next became a Presidency under the Viceroys of Peru until the year 1710, when it was transferred to Santa Fé. In 1722 it was again attached to the Peruvian Viceroyalty under which it then remained, presenting no features of political interest until 1809. Agitations for separation from the control of the mother-country then began; and at length independence was attained in a decisive victory gained by the revolutionary general Sucre over the presidential troops, in 1822, the last Royal Spanish President being forced to abdicate.

At the time of this event, more than two centuries and a half of monotonous colonial administration had passed over the country; but at length the long dormant excitability and political ambition of the inhabitants began to assert themselves. A society which had for generations lain stagnant and insipid, in almost complete ignorance of the outer world, roused itself to action;

and men devoid of the commonest principles either of political administration, economy, liberty, or order, began to intrigue for power in the government of a "Republic."

How unfit these people must have been to take upon themselves the responsibilities of self-government is well illustrated in the following sketch, drawn by one of themselves, of their social and intellectual conditions during the epoch of colonial administration; and although this passage has in recent years been quoted in another work, from its aptness, it will bear repetition. "If we examine," says Villavicencio,* "the social condition of the people of Ecuador in those times, we shall find it tranquil, apathetic, and perhaps patriarchal, but reduced to its own limits, without knowledge, without communications, without life. The majority were unacquainted with sciences, events, or men, and even probably ignored that there existed men, events, and sciences to be known. Their religion consisted in outward practices and in the imperfect comprehension of papal bulls; their morality in asceticism and love of their king; their philosophy in the sophistries of Aristotle; their history in the history of the mother-country; their geography in the maps of Spanish America and Spain; their printing in bill forms; their commerce in simple coasting trade; their pride and highest ambition in titles of nobility; their pleasures in bull-fights."

Hitherto they had not had to think for themselves;

* 'Geografia del Ecuador,' p. 8.

and even in private trade prices and conditions were laid down by law, leaving no exercise to the commercial ingenuity of the individual. Another writer,* who has searched through all the old authentic records of the Cabildo at Quito, tells us that "immediately after the foundation of Quito, the Cabildo commenced to regulate all the affairs of daily life. The charges of tavern-keepers were fixed by law, without any reference to the fluctuations in the market price of provisions. Bakers were ordered to give thirty-five pounds of bread for one *peso* of gold, under penalty of ten *pesos*. It was declared an offence to charge more for a *fanega* of wheat than two *pesos*, or one *peso* for the *fanega* of Indian corn. The shoemakers were commanded to make shoes at two *pesos* two *tomines* the pair, and boots at four *pesos*. In 1537, the prices of blacksmith work were regulated by law, and the transgressors threatened with heavy penalties. It was declared unlawful to leave the city without a permit or order from the Lieutenant-Governor; offenders to be fined fifty *pesos*. Persons who were out of Quito during the Christmas or Easter festivals incurred a fine of ten *pesos*. Under penalty of death and confiscation of property, it was ordained that nobody should barter or buy gold, silver, or pearls from an Indian, except in the presence of the royal *veedor* (superintendent), whose duty it was to see that the transaction was not against the will of the Indian, and that the king was not defrauded of his fifth. This latter seems to have been

* Hassaurek: 'Four Years among Spanish Americans.'

the principal consideration, for the conquerors were certainly not over-scrupulous with regard to the consent of the Indians. On the arrival at Quito of an attorney, he was forbidden to exercise his profession, or to give advice or his opinion on any controversy or matter of litigation. An individual who knew the art of smelting precious metals, was prohibited from leaving the town until another should have arrived competent to take his place."

"After the ringing of the night-bell nobody was allowed to show himself in the streets. (Even as late as the commencement of this century, persons were liable to be arrested for showing themselves after the ringing of the night-bell in the streets of Quito.) It was ordained that, considering the danger of conflagrations, every property-holder should, within eight days, destroy all the *ranchos* on his lot, *under penalty of forfeiting for every offence the best Indian woman in his possession, whom the captain was thereupon to assign to whomsoever else he might think proper.* Some persons, and their servants and Indians, were in the habit of diverting the water-courses which furnished the town with water. It was therefore ordained that every person so offending should, if he were a Spaniard, be fined thirty *pesos;* if he were an Indian, *his nose was to be cut off.* The height of kitchen walls was prescribed by law. A hammer was not to be sold for more than one *peso,* &c., &c." *

* All these regulations, quoted by Hassaurek, are taken from Municipal Records still existing at Quito.

Such was the colonial administration, until towards its close; and the foregoing is a truthful picture of the conditions under which the Ecuadorian people had lived for generations. This cannot but diminish our wonder that their self-government should have proved a failure; indeed, expressions of surprise could only be justified had a *régime* introduced suddenly and under such circumstances resulted otherwise.

The independence from Spain consummated, Ecuador at first incorporated itself into the triple State of Colombia; but following the example set by Venezuela, separated from it in May, 1830 and formed an entirely independent State, under Flores, its first republican President. In 1832 the provinces in the north, Cauca, Buenaventura, and Pasto, passed over to New Granada.

To follow Ecuador as a Republic through all its political changes up to the present day would, although the period is little more than half a century, besides being a constant repetition of rebellion among the troops and people, with consequent numberless and complicated revolutions and changes of Presidents, Supreme Chiefs, Provisional Commissioners, and Dictators, be both tedious and foreign to this superficial sketch. The prophetic words of General Bolivar, the great Liberator of the Republics, spoken when he had accomplished his labours for freedom, are unwittingly called to mind, and show us that the first of South American heroes was not blind to the possible results of the failings of his countrymen. He said, "This country will inevitably

fall into the hands of the unbridled rabble, and little by little become a prey to petty tyrants of all colours and races. If it were possible for any part of the world to return to a state of primitive chaos, that would be the last stage of Spanish America."

Let us hope that a better future, than this vaticination foretells, is in store for this, by nature, richest and most wonderful portion of our earth!

APPENDIX I.

VOCABULARY OF THE ZÁPARO LANGUAGE.

(NOTE.—*Pronunciation as in Spanish.*)

One		Nucuáqui
two		anamishiñáqui
three		aimucuraqué
four		manucuaquicuajnótsa (*Supinu*)
	or	huetsaramajáitiaca (*Yasuní*)
five		mánucua
above five, many		mánunu
man		táúcuo
woman		itiúmu, pl. itiumuéra
son		niáno
father		cúmanu
mother		mamajá
sister		cuíña
brother		cuánana
medicine-man		shimáno
devil		samáro
friend		yanása
husband		quiráno
companion		ároco
savages (*aucas*)		mehuáno
partridge (small species)		neguá
wild turkey (*pava*)		catsagüíña
curassow bird (*piurí*)		camarána
„ „ (*paují*)		piócua
trumpeter „		matsácu
mangoe „ (*oriole*)		mucútso
crow (*shira*)		tsicséca
turkey-buzzard		amúcua
domestic fowl		ataguarítui
eggs		fcucua
birds (in general)		pisháca
macaw		surá
jaguar		imatíni
tapir		yasúcua

capibara	acáiya
fish	maráishi
peccary (smaller species)	cáshi
„ (larger „)	yári
agouti	täurijja
deer	niquéro
dog (domestic)	ariócu
„ of the woods (*perro del monte*)	píñocua
turtle	yaurícha
snake	cóno
tarantula spider	cononáca
monkey (*Simia caraya*, Hum. ?)	patócua
„ (Machin)	cuatéco
„ (*Mycetes palliatus*, Gr.?)	tsitsócua
„ (*Simia seniculus*, Linn.)	aritiócucua
„ (*S. paniscus*, Linn.)	áitio
„ (*S. sciurea*, Linn.)	quiócua
„ (*Chichico*)	ítseca
the forest	nácu
fire	anamishúcua
water	muricha
sun	yanócua
moon	cashícua
heavens	níacöuhira
earth	rapáca
rainbow	hüiatche
light (fire)	nuntána
firewood	aishócua
salt	ichójua
charcoal	unishíac
ashes	unámujua
rain	humáro
wind	párato
sandbank, beach	ayójua
tree	nacúna
log	hámaca
snag (in the river)	aguána
leaf	juéca
tobacco	jaunéca
pimento (*capsicum*)	anacúcua
thorn	ijióto
wax	tupáca
maize	säuco
cassaba (*yuca*)	múe
plantain	pujióca

poison (for darts)	numánaca
clothing (cotton cloth)	shíro
chicha	casúma
paddle	táquistaca
punting pole	caráhuana
canoe	yára
gun	imacána
knife	sapúcua
axe	cajícha
lance	acachíne
pot (earthen saucepan)	cóushima
bowl (calabash)	samarico
fan (for the fire)	apítio
food, victuals	atsactsáca
broth, gravy	nacuácone
blowgun	numanucuá
head	ánaca
eyes	namíjia
hand	ichiosú
arm	curamáso
nose	najúcua
mouth	atupáma
foot	iñocuá
leg	íñácu
fingers	cansúa
calf (of leg)	tanúmaco
hair	naquéso
lips	yatsócue
seat	tapuáco
belly	tahuáca
entrails	maráca
blood	nanáca
skin	puetsócue
soul, spirit	tsóhuano
where	täíte
here	aní
there	áti
far	táicua
near	aníti
yes	ingyá
no	áitia, taicuá
small	nichacáqui
high, tall	nauco
large	queráitio
heavy	iñáca
light	suáca

how many, how much	tiáiqui
early (in the morning)	taricágue
I	cuí
thou, you	chá
my, mine (prefix)	cu
he	no
they	notena
(plural termination)	(cu, era)
hard, with strength	anajicha
hard, dense	tocúru
thin	másecu
fat, stout	cúëro
fat, greasy	tsutúäno
idle, lazy	secáno
in love	míscuashiano
bad	cóshicha, sacushíno
stingy, mean	jumuitúcua
red	natúcua
to-morrow	tariqué
I go, I am going	cuicuáraja
go with me, let us go	páicuámaja
come	aníma,
come thou (imper.)	chananíma
he comes	nonaníma
let us go into the forest	icua nacujiña
no, there are none (negative)	taicuá
to eat	chatsácua
eat thou (imper.)	chatsá
give me	chacuiño
bring me	tiantiama
thou shalt bring	chañantiáma
tie up (imper.)	chamaró
twist „ (of rope)	chanucuasóni
paddle „	chataquío
drink „	charatú
where are you going?	tai cha táicuáca
go thou (imper.)	cha-naicuáma
what is it?	catsacá
what is this?	catsacáte
what pains you?	catsacáte quíranu cuícha
what are you looking for?	catsacáno
call him, call thou (imper.)	cha-píño
he calls you	no píñocuche
he calls us	no piñocúpue
it must be they, these are the bad chicha	nucuajaténa-iquícha
	socoshícha casúma

APPENDIX II.

PIOJÉ WORDS.

(In pronouncing, the final vowels are always cut very short.)

NUMERALS.

One	Moñó
two	tsamuncuá
three	tsamunhuentecuá
four	tajesecá
five	teserapuí
six	tequenatequí
seven	tequenatsamuncuá
eight	tequenatsamunhuentecuá
nine	tequenatajesecá
ten	tsëäínya, or chanteserá
(The Piojés cannot count beyond ten, and from six the numerals are composite.)	
hair	dañá
beard	séhüe
cold, catarrh	huairahué
bad	cuáco
no, the negative generally	piojé, piocó
wild turkey	ujé
fowl	curá
eggs	curá, tsía
tiger (jaguar)	iái
tapir	huenqué
peccary (small species)	sensé
„ (large „)	tayasó
turtle	cóhu
manati	síhuenqué
farewell	sayé

fire	tóá
water	ocó
sun	ensé
moon	ñañé
stars	mánioco
stinking	cuátsinco
salt	ansí
rain	ocó
it is going to rain	ocó rajé
wind	tutú
tobacco	mentó
pineapple	insí
maize	hueá
yucca (cassava)	ansó
mandioca	simá—ansó
plantain	nuncá, öo
cloth, cotton shirting	húicá
sugar-cane	canté
cane-juice	canté-payó
gun	túacapo (Aguarico)
knife	huatío
axe	súpo
lance	huehuáti
pot, saucepan	icúru
letter	tayáhäua
what is it ?	quimamí
yes, we have, there are some	paíco
have you hammocks ?	paicó jangré
beads	ñucuáco (Aguarico) yiyó (Putumayo)
sarsaparilla	Paúcuo
indiarubber	icá
pirarucu (fish)	tentó
wanting, short	yuré

APPENDIX III.

HEIGHTS OF TWENTY MOUNTAINS, DETERMINED BY MESSRS. REISS AND STÜBEL.

	Feet.
Chimborazo	20,697
Cotopaxi	19,493
Cayambe	19,155
Antisana	18,880
Altar	17,735
Sangay	17,460
Iliniza	17,400
Carahuirazo	16,748
Tunguragua	16,685
Sincholagua	16,360
Cotocachi	16,288
Quilindaña	16,134
Corazon	15,796
Guagua Pichincha	15,701
Rumiñagui	15,603
Rucu Pichincha	15,537
Saraurcu	15,700
Quilimas	15,452
Imbabura	15,029
Cerro Hermoso	15,009

All are volcanic excepting Saraurcu and Cerro Hermoso.

HEIGHTS AND MEAN AVERAGE TEMPERATURE OF TOWNS AND PLACES ON THE UPPER PASTASSA, DETERMINED BY MESSRS. REISS AND STÜBEL.

	Feet.	Centigrade.
Quito	9,348	13·2°
Ibarra	7,688	16°
Latacunga	9,187	14·2°
Ambato	8,554	15·3°
Riobamba	9,148	13·7°
Cuenca	8,469	14·6°

	Feet.	Centigrade.
Cajabamba	10,512	10·8°
Papallacta	10,351	9°
Coltacocha	10,784	10·8°
Penipe (at the bridge)	7,754	
„ village	8,101	
Baños	5,904	17·5°
Agoyan, new bridge	5,471	
„ farm	5,379	
Rioblanco bridge	4,982	
Antumbos farm	5,208	
Rioverde farm	4,910	
Mahai farm	4,989	
El Mirador	5,028	
Mapoto farm	4,057	
Sta. Inez farm	4,080	18·3° (?)
Rio Topo, crossing	4,021	
Rio Zuinag or Shuñi	4,034	
Rio Chulo-aya	4,077	
Habitagua	6,015	
Rio Quilluc	3,601	
Ashpayacu	3,467	
Barrancas	3,955	
Jivaro plantations at Pintuc ..	3,217	20·4°
Surface of soil in forest ..	3,336	19·5°

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